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JOURNAL
OF THE
ASIATIC SOCIETY

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VOL. XIV.

PART II.—JULY TO DECEMBER, 1844.

Nos. 151 to 156.

NEW SERIES.

"It will flourish, if naturalists, chemists, antiquaries, philologers, and men of science, in different parts of *Asia* will commit their observations to writing, and send them to the Asiatic Society, in Calcutta; it will languish if such communications shall be long intermitted; and will die away if they shall entirely cease."—SIR WM. JONES.

CALCUTTA:
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1844.

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JOURNAL
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ASIATIC SOCIETY.

*Note on the Navigation of the river Nurbudda. By Mr. A. SHAKESPEAR,
Assistant Secretary to Government N. W. P.*

The benefit which would result from opening a direct communication from the sea into the heart of Central India, by means of the Nurbudda river, was acknowledged by Major General Sir J. Malcolm as far back as 1820, and steps were taken by that officer for collecting the necessary information.

Since then, although no regular scientific enquiry has been instituted, yet Government has, from time to time, shewn itself alive to the importance of using the stream of the Nurbudda as a medium of communication, and making it an outlet for the produce of the neighbouring country.

Upon its waters the products of the valley of the Nurbudda, rich in mineral and vegetable resources, would be borne to a market, and available for adding incalculably to the national wealth.

But it is only of late years, since extensive coal beds have been discovered to exist within a short distance of its banks, and the value of the mineral to be there procured has been tested and established, that the still greater importance of this stream has been felt.

In the present day, when steam communication has become so extensive and so necessary, we cannot too deeply feel the importance of relying upon this country alone for the supply of coal required for its consumption. No coal has been found nearer to Bombay than that above alluded to in the Hosungabad district. All this supply therefore would be available for the western coast. The discovery of coal beds at a nearer point than they are now, is so remote a contingency, that it can hardly be said to affect the present question.

The following compilation has been made with a view to exhibiting, in a concise form, all the authentic information which has been obtained up to the present time regarding this important river.

The materials from which it has been drawn, consist chiefly of official documents on the records of Government, extending from 1820 to the present time. An extract has, however, been appended from an interesting report, to be found in Appendix No. II, of Malcolm's Central India, on the Geology of that part of the country, furnished by Captain Dangerfield.

The map (reduced from one compiled in the Office of the Surveyor General of India,) which will be found attached, shews the course of the river from Hosungabad to the sea. On it the principal obstacles to the navigation are noted.

The amount of information already acquired may be best exhibited by dividing the whole length of the river, from Hosungabad to the sea, into three portions, and treating each separately.

1st. From Hosungabad to Mundleysir.

2d. From Mundleysir to Tulluckwara, and

3d. From Tulluckwara to Baroche.

Hosungabad to Mundleysir.—The river taking its rise in Gondwarra passes Hosungabad in a stream of about 900 yards broad, and is at this point, distant about 318 miles, in a direct line from the sea.

Between Hosungabad and Mundleysir our first information regarding the stream is derived from a report made by a native surveyor employed by Captain Ouseley, Principal Assistant to the Governor General's Agent at Hosungabad.

This survey* was made in 1833-34, and from it Captain Ouseley, considered that "the possibility of making the whole river navigable exists, but the expenses would be great, with the exception of Dhadree, where a loch would be requisite, or portage if an uninterrupted navigation were adopted. There is no place from Behraghur near Jubbulpoor to the mouth of the river, that might not be rendered passable for such boats as are now used, thirty or forty feet long and eight or ten wide, flat bottoms. All the places in the sketch marked as rapids could, with trifling expence, be rendered passable. Mundhar, twenty or twenty-five miles east of Dhadree, is a fall of ten feet, but on one side a rapid only, and could be cleared. From Dowlutpoor to Oonkerjee, the sides are high rocks generally, and a contracted and very rapid current running among detached rocks and islets."

The rest of this portion he speaks of as wide and navigable. Regarding the fall of forty feet at Dhadree, he considered, that even if this proved an insurmountable obstacle to a continued navigation, it might be made a place for unloading above, and replacing the goods in other boats below the fall; a portage of half a mile only would be required.

It must be borne in mind, however, that these opinions were expressed upon the report of a native surveyor, who, although a man of apparent intelligence, could have had no experience, and very limited knowledge of the means available for improving navigation. It does not appear, moreover, that he took any steps for ascertaining with accuracy the fall of the river, or making such observations as would afford grounds for deciding on the steps which would be necessary for overcoming the obstructions to be met with.

In 1840, in consequence of the repeated representations of Lieutenant 2d. Lieut. Hore's experimental trial. Hore, Junior Assistant at Saugor, an experimental trial,† to transport coal by rafts from Hosungabad was made on a small scale by Lieutenant Browne, Principal Assistant at Hosungabad.

In reporting in November 1840, the total failure of the attempt, Captain Browne writes as follows: "From Hosungabad to a distance of 20 or 25 miles below Hindea, the river is open during the rains;

* The original survey is not to be found on record, Captain Ouseley appears only to have submitted the result of it with his opinions.

† Made between August and November, 1840.

but there, from the description of the person sent with the boat, a fall of a considerable height is met with, sufficient to stop the progress of any boat; every inducement was held out to the boatmen to proceed further, but they flatly refused, and would not even permit their empty boat to advance without being insured the value of it."

"From enquiries made of the boatmen at Hindea, it seems that no boat has ever been known to pass this place, and it is considered by them an impossibility."

Captain J. Abbott, late Assistant in Nimar, whilst in charge of 3d. Capt. Abbott. that district, "lost no opportunity of collecting, and noting down, all the information procurable from persons who had visited the principal obstacles." His own actual knowledge was limited to the boundaries of his district. From what this officer states in his observations upon the obstacles impeding the navigation of the river, submitted in March of the present year, it appears that from enquiries he had made, the river is navigable, (except in the driest season, when it is spread over too wide a surface,) from Hossungabad to within 20 miles of the Dhadree falls. That at Dhadree it is precipitated over a ledge of rocks forty feet in height, and for about 20 above this, navigation is impeded by rocks and rapids. The rest of this portion, *i. e.* from Dhadree to Mundleysir, is navigable the greater part of the year to vessels of light burden; but during the very dry months, from the middle of March to the middle of June, the water at the rapids is too shallow to float the larger river craft.

Regarding the second portion; viz. from Mundleysir to Tulluckwara, 11d Portion. we have fuller and more satisfactory information.

As early as 1820, Major General Sir J. Malcolm had contemplated 1st. Lieut. Mathias' opening a river communication with Baroche, and journey in 1820. with this object several officers were deputed by him to survey the course of the stream. The following extract from a Journal of a Voyage made down from Mundleysir by Lieutenant V. Mathias, of the 6th Regiment N. I. gives us our first information respecting this portion of the river:—

"Left Mundleysir on the morning of the 26th March 1820, in an open boat called a punt, made out of a single tree, about 12 feet in length, 20 inches in breadth, and drawing 18 inches water, with myself, two boatmen, and a small quantity of baggage.

“ From Mundleysir to the Hern Phall, a distance of eighty (80) miles, there is an uninterrupted navigation for small boats from the commencement of the Monsoon till the end of April, and it is then only interrupted in one place,* three miles below Muheysir, where part of the river falls down a small precipice, and a back stream is there made use of for the boats. But during the last six weeks of the hot weather, from the shallowness of the water, and the boatmen neglecting to deepen the back stream as the water decreases, it of course becomes dry; but should it ever be required to be made use of during those six weeks, I have no doubt, from the appearance of the river, that a little labor would make it navigable all the year round.

“ From the nature of the rocky bed of the Nerbudda at the Hirun Phall, I conceive it impossible that the obstacles to navigate it could ever be surmounted. From the circumstance of small ridges of rocks running parallel to each other in the river, and only distant from twelve to twenty feet, it causes such a rush of water through them, that the boatmen are afraid to pass it, being unable to guide the boat clear of the rocks; and one which I prevailed upon the men with some difficulty to make the attempt with, was upset, and the men much bruised against the rocks. But a still greater obstacle exists about a mile below that, where nearly the whole water of the river rushes into a channel not more than forty yards broad, attended with a considerable fall, and with such violence, that any boat trying to pass it, must inevitably be lost.

“ Finding myself unable either to proceed along the bed of the river or in a boat, I determined upon getting down to Hamp Island, in the expectation that I should there be able to get boats and return by the river to the Hirun Phall, or if not, proceed from thence to Baroche; for which purpose I came back about three miles, and landed on the North bank of the river at the small village of Dhair, and proceeded nearly due North to Kooksee along a good cart road, distance ten miles and seven furlongs. From hence I marched in a North-west direction to Rajpoor, distance twenty-nine miles and one furlong; also a good cart road, but the last twenty miles is through a thick jungle. I then moved in a Southerly direction to Allie Mohun, through an

* Luhesvidara.

open jungle, distance nine miles and five furlongs, till within two miles of the place, when it thickens to a deep jungle with small hills. From that to Moondlah, a distance of twelve miles in a South-west direction, through a deep moving country, in many places well cultivated by the Kressans, or Bhillala tribe, and thickly studded with large mowah trees. From this I went to Oomtee in a Westerly direction, ten miles, through a beautiful cultivated country, thickly planted with the largest description of mowah trees; and from hence to Hamp, in a South-east direction, by the Gore Ghaut, is ten miles and six furlongs, and is through a wild hilly and jungle country, cultivated in spots for the first five miles by the Kressans.

“ Here I was much disappointed in finding myself unable to proceed in any direction, from the nature of the country and the rocky bed of the river; and to add to my further disappointment, not a boat was to be procured, nor could I hear of one ever having been seen between the Hirun Phall and Mokree, except the punt, or small passage boat at this place, now useless from its decayed state. The bed of the river is here, when full, about two furlongs in breadth, with masses of large rocks in every direction, and the water at this time confined within a narrow deep channel from twenty to forty yards in breadth, as far as I could see from the highest hill in the neighbourhood; and in one spot that I went to the channel was not ten yards in width, the water rushing through it with a slight fall and tremendous force. Nothing now remained, but to make my way to Makree by the nearest route I could find; but not being able to take my baggage through hills, I was obliged to go to Kewaunt in Guzerat, and only distant from the Gore Ghaut in a Northerly direction eight miles. From that I went to Barsnee, in a South-west direction twenty-one miles and seven furlongs, through an highly cultivated country, thickly studded with mangoe, mowah, palmira and other forest trees. From hence to Tulluckwara on the Nurbudda, in a South-west direction is twenty miles and seven furlongs, through an open jungly country.

“ Here I again embarked, and went up the river as far as Mokree, distance about twenty miles, and there found an insurmountable obstacle to navigation in a fall of the river which of itself is inconsiderable, but prevents the possibility of a boat ever passing it. I then re-

turned to Tulluckwara, where I had left my baggage, from inability to take it with me from the hilly nature of the country.”

In addition to this, and in order to establish the fact of the navigability between Mundleysir and Chiculdaah beyond
 2d. Major Wilson's journey. a doubt, Major Wilson, at Sir J. Malcolm's request,* went from the Hirun Phall to Mundleysir in the end of July 1820, “when the small quantity of rain that had fallen rendered the river uncommonly low for the season.”

“The result† of the examination of this part of the river,” Sir J. Malcolm writes, “was that with the exception of the portage of Luchesvidurrah near Moheysir, where the river, from the fall or rather rapid, is always very difficult, and sometimes dangerous; the navigation between Mundleysir and Chiculdaah was practicable for light craft nine or ten months in the year.”

Major Wilson also informed Sir J. Malcolm, that from his enquiries, and from the meteorological observations he made whilst he was at Mundleysir, it appeared that the wind blew at this time of year almost always from the West, increasing with the Monsoon, and enabling boats, when the current was at its height, to stem it, and to go in two or three, and sometimes in one day from Chiculdaah to Muheysir.

He stated, that the river between Hirun Phall and Mundleysir was almost straight, and that this was a great advantage to the flat-bottomed boats, as they never had to shift sail in coming up. In going down, they were aided by the current and resorted to punting, where that was slack and the water shallow.

Lieutenant J. Anderson of the 17th Regiment Bombay N. I.
 3d. Lieut. Anderson's journey in 1842. was appointed to survey the Nurbudda between Hindea and Hirun Phall in October 1841, but owing to the non-arrival of the necessary instruments, he was prevented from making any regular survey. When ordered to join his Regiment at Bombay, he resolved to proceed viâ Baroche in a canoe, “hoping to contribute somewhat to the scanty information already possessed regarding the very difficult portion of the river between Hirun Phall and Soolpan.”

* In a boat which Sir J. Malcolm mentions, as “a large and rather heavy passage boat.”

† We obtain our knowledge of the result of Major Wilson's trip through Sir J. Malcolm. No Journal by Major Wilson being on record.

The following extract from his report gives the result of his observations as far down as Tulluckwara, with an account of the measures he was compelled to adopt when stopped in his further progress at the mouth of the Hatnee river :—

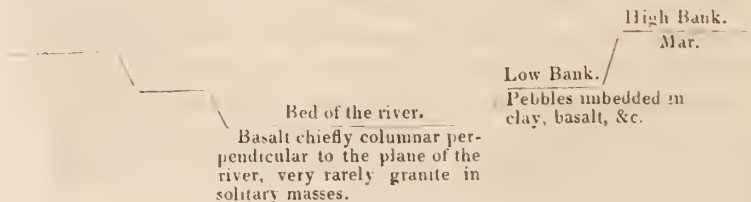
“ I left Mundleysir on the morning of the 21st March 1842, in one of the ordinary passage boats used at the ferry, halted for the night at Kuttora, and arrived at Chiculdah on the evening of the 22d at sunset.

“ This portion of the river, fifty-one miles in length, is navigable by boats lightly laden until nearly the end of the dry weather, with the exception of the rapids called Sahesur Durrah, which are about two miles below the town of Muheysir.

“ This is rather a formidable obstruction, consisting of a belt of rock stretching diagonally across the river, and intersected by a great many narrow and tortuous channels, through which the water rushes with great impetuosity, until it is finally precipitated over a shelf about eight or ten feet in height into a sort of trough, at the extremity of which it again becomes navigable. Luckily, however, there is a back stream near the Southern bank, which affords a rather difficult passage for unladen boats until within about a month of the rains, but might easily be made practicable throughout the year by means hereafter explained.

“ Between this and Chiculdah there are a few shallows and rapids, but I observed no obstacle particularly worthy of notice, and have no doubt that a comparatively trifling outlay would render this portion of the river available for boats much larger than that I sailed in, for nearly, if not quite, the whole of the year.

“ From Mundleysir to Chiculdah, the bed and banks of the river present every where nearly the same features which may be exhibited by the following section :—”



“ I left Chiculda on the morning of the 26th, passed Hirun Phall, slept on the bank of the stream nearly opposite to the village of Burkhery, and reached the mouth of the Hatnee next evening the 27th, where we spent the night on a rock in the centre of the river.

“ Our progress was unimpeded for twenty-five miles below Chiculda, the river having mostly the appearance above described, until we reached Dhurnarag, and (spelt Dhurmcode in the plan,) where it makes a bend to the South, and its aspect is totally changed. Here there is a gradual increase in the strength of the current, the rocks become larger and more numerous, and the stream being somewhat contracted, is divided into several channels through which it darts with considerable force.

“ Although I experienced little difficulty in passing this rapid, and have ascertained that light boats may be taken up and down at this season without danger, if guided with ordinary care, it is nevertheless to be considered a serious obstruction to navigation, since from the position of the rocks it must be a dangerous spot when the river is swollen, and from its extent it would require a good deal of labour to make it generally available for traffic.

“ This is one of those places which, on the score of expense, it might, at first sight be thought advisable to avoid by means of a road; but a more accurate inspection than I had time to afford, would I conceive, shew the possibility of overcoming even this obstacle at no very enormous cost, partly by clearing the channel, and perhaps partly by the mode recommended in my concluding remarks.

“ Below this the river is deep, and continues so to the Hirun Phall, about a mile further down, where the greater part of it rushes through a channel only a few yards in width, with a force against which it would be useless to contend.

“ The fall of this rapid is gradual, its channel varies little in breadth, and throughout its entire length, which is considerable, the water is broken into foam. But notwithstanding its formidable appearance, of which its length is the most discouraging feature, I am by no means inclined to regard it as so important as has been represented, its proximity to the bank and the slope and position of the neighbouring rocks being particularly favourable for the construction of a road or locks, as might be found most convenient.

“ I here left the large boat, as originally intended, having brought with me a canoe hollowed out of a single tree, and remarkably strong, in which I proposed to make the rest of the voyage.” This we managed to get down with but trifling injury, not however until it had been repeatedly upset, and once or twice sunk, although I had a couple of strong ropes attached to it, and the assistance of five or six persons to guide it.

“ If found expedient a road, apparently about a mile and a quarter in length, might be made on the northern side of the river, by which both this and the rapid above might be cut off; but owing to the unevenness of the banks its construction would be expensive, and it may reasonably be doubted, if the saving obtained by adopting this plan in preference to others would counterbalance the disadvantages of a mixed communication. This question can be determined only by the most careful levelling, and a thorough and minute examination of the spot during the different phases of the river.

“ Between this and Kukranuh, which is about sixteen miles below Hirun Phall, I met with only three interruptions, so exactly alike, that one description will answer for all. At these places there is an abrupt descent of the river, and the channel becomes suddenly contracted, the stream rushing through with such violence, that we were obliged to use every precaution in letting down the canoe. However, it luckily happens that in all of these the fall is inconsiderable, and the channel narrows only in that particular spot, so that unlike the Hirun Phall, there being no length of rapid to overcome, the difficulty of making them navigable would be comparatively small.

“ With these exceptions, I found the voyage both easy and pleasant, and it struck me, that from Hirun Phall to Kukranuh, there were fewer shallows and a greater portion of really navigable water, than in any portion of the river of the same length that I had met with above.

“ At Dhurmeaj, as before stated, the bed of the river is slightly contracted, but below it resumes nearly its ordinary width, the main body of the stream being in most places confined to a narrow channel somewhat resembling a canal. A little below Hirun Phall, the rocks rise on both sides in perpendicular walls, and the water is uncommonly deep, flowing for a long way with a gentle current, and with-

out the slightest impediment. It is also worthy of remark, that in the spots already alluded to, where there are serious obstructions, the rock is but little elevated above the surface of the stream, and that for nearly the whole way from Hirun Phall to Kukranuh there is a low bank either on one side or the other, but generally on both, where a road might be constructed if necessary. The hills on either hand are pretty high, and covered with jungle.

“Kukranuh is a Bheelallee village in the Rajpooor territory, and situated on the Eastern bank of the Hatnee, about a mile from the Nurbuddah.

“Here I was unfortunately compelled to abandon the idea of following the course of the river, the boatmen, from the reports they had heard of the unsettled state of the country, refusing to proceed any further without an escort to protect them. I accordingly remained at the village for three days, trying every expedient that I could think of; but although I offered a handsome reward, no one could be prevailed on to accompany me to Haump, so great was their dread of the Bheels. Finding therefore that nothing more could be done, and unwilling to incur censure by any further delay, I was forced reluctantly to make for Tulluckwara by land, intending to proceed thence by water to Baroche.

“On the 31st, I marched four coss North to Walpooor, a village belonging to Rajpooor Allee, reached Chucktollah on the 1st April in a westerly direction eight coss, and Kona at five coss West on the 2d, on the 3d I proceeded to Barnee and arrived at Tulluckwara on the 4th.

“There is a garree track the whole way, having the appearance of being much used, which the natives told me was the case; in some parts it leads through a pretty thick jungle, and here and there it is hilly, but no where very steep, and on the whole, it is as good a road as most of its kind.

“I was informed that there is a direct road from Wallpooor to Chicultdah; and subsequently learnt, that there is a shorter route from Kowant to Tulluckwara than by Barsnee; from which we may infer, that should my information prove correct, this would probably be the best line of road for establishing a land communication between Chicultdah and Tulluckwara. The distance from Kowant, through Barsnee to Tulluckwara, is about forty-one miles, and that from

Walpoor to Chiculda, cannot, I think, exceed forty, so that taking the shorter route from Kowant to Tulluckwara, and reckoning the coss at two miles, the entire length of road would be about one hundred miles, and Dhurinraj being fifty miles lower down, the distance might be still further reduced by making that the debarking point, instead of Chiculda.”

From* the information gleaned by Captain Abbott it appears, that 4th. Capt. Abbott. the river between Mundleysir and Chiculda is navigable for lightly burdened boats for the greater part of the year. Below Chiculda, he says, the stream is broken by long ledges of rock into a number of narrow channels, forming what is called the Hirun Phall, or Deer's Leap. These rocks, he further states, were described as being extremely solid, and severed by intervals of sixteen or eighteen feet.

“ A mile below this, it finds a single channel of forty yards, bounded on either side by cliffs, into which the stream, 600 yards in width, contracts in volume as it rushes down the declivity of this gorge with extreme fury.”

This officer, however, after describing from hearsay this formidable obstacle, considers that there are reasons for believing its difficulties to be exaggerated.

To the information thus obtained regarding this portion of the river, 5th. Sir C. Wade's 1820, from Lieutenant Mathias and Major Wilson in testimony. 1820, from Lieutenant Anderson in 1841, and from Captain Abbott submitted in the present year, it may be satisfactory to append the opinion of the late resident at Indore, Sir C. Wade.

He writes as follows: “ Having seen the obstructions of the Nurbudda in almost every part surveyed by Captain Anderson, his description of them appears to me to confirm more closely to their real nature than that of any other which I have met with, excepting where he assigns a fall of eight feet at the Suhesur Durruh, near Moheysir, which does not in my opinion exceed five, and with respect to the length of the Hirun Phall fall being considerable, which did not strike me as being so. I should say it cannot exceed sixty or seventy feet, and is composed of detached masses of rock, which I am con-

* This would appear to be independent of Lieutenant Anderson's.

vinced would easily yield to explosion, in the hands of a scientific Engineer accustomed to the removal, by that agency, of such obstacles."

This officer concurred with Capt. Anderson in considering that the magnitude of these obstructions has been exaggerated, and recommended that the survey should be entrusted to one Engineer alone, with such assistance as might be necessary. He considered it a great mistake trusting for our knowledge of the river to partial observations made at different times and by different persons, who each had his own peculiar views on the subject.

Regarding the navigability of the stream between Tullukwara and Illd Portion. Baroche, there is no doubt.

Our first account is derived from Mr. W. Webbe, who furnished a memorandum on this portion of the river in June 1820.

"The navigation from Baroche to Tulluckwara is not open until 1st. Mr. W. Webbe's Memorandum in 1820. fifteen or twenty days after the monsoon sets in, or after the water in the Nurbudda begins to rise, which is generally about the beginning of July; it is first navigated by boats of the burden of ten kulsies or eight candies to fifty kulsies or forty candies, some laden and others not; they run up in four or five days, and sometimes in three with a strong S. W. monsoon wind, and return heavily laden much about the same time with the current in favor. Boats of these burdens can navigate to Tullukwara until the Dewallee feast, or the month of September, after which the navigation becomes difficult, if not impracticable. Those of fifty kulsies have five men in each, and those of ten or twenty have two to four men. These draw, when heavily laden, from five to three and a half feet water; after the month of September these boats take fifteen days to go, having one or two additional hands in each, and return in six or seven days, the current and wind being then against them they are obliged to track the boat in going up.

"After an interval of a few days, and after the Nurbudda has considerably risen, boats of a larger burden, from one hundred to one hundred fifty kulsies (which are the largest) eighty candies or one hundred twenty candies leave Baroche for Tullukwara with ten men in each, the trip up and down is performed much about the same time as those of a lesser burden; they return heavily laden, and leave

this either full or empty. Boats of these burdens can only navigate until September, or three months at the furthest; they draw about seven or eight feet water. These boats go even as far as Deygowm Peeplia, which is about fifteen or twenty coss higher up, but not always with that facility as from Baroche to Tulluckwara, on account of the river having a rocky bed, and the current in places being very rapid, besides there are three Ghauts to pass: Tulluckwara, (which is the most difficult), Ukteysir and Bhimpary. In order to get over these obstacles, the boatmen are obliged to send out long ropes from the end of their mast to be fastened to the trees on the banks of the river, and by this means draw the boat forward over the stream. This passage is performed in three or five days, and is the utmost limit that boats have ever ventured: beyond this the navigation is said to be impracticable. Sometimes these boats in returning from Tulluckwara are interrupted in their progress at the Ghauts, which are seven in number; viz. Tatreedra, Bawapeara, Umraulee, Kundalee, Chaundode, Kenoraulee, Nuredda and Thoomdee, owing to the fall of the freshes, or by an interval of no rain for ten days or a fortnight. The boatmen are then under the necessity of lightening the boat by emptying a part of the cargo into a smaller one along side, and filling it again after passing these Ghauts; this is done by getting a villager from the nearest place, who understands the channel. He proceeds forward on a small raft or canoe with a long bamboo sounding, and the boat after him.

“All boats that leave this for Tulluckwara have a sloping roof built on them with bamboos and mats, to preserve the goods from the rain; the larger ones are also built up at the sides with the same materials to prevent the water washing in when deeply laden. These boats are built like all others that are used on this side, having no decks, with one mast, and a triangular sail.

“Boats from sixty to seventy kulsies burden can go to Tulluckwara after September lightly, but cannot return heavily laden.

“The tide is felt only as far as Reenuapoor, about twenty-five or thirty miles above Baroche, where it does not exceed a span in height.

“It is impossible to fix dates when the navigation of the river opens and ceases: all depends on the mousoon, and the quantity of

rain that falls inland in the countries through which the Nurbudda takes its course: if it begins early, the boats of course leave this early, and the navigation continues as long as there is sufficient water for them to float up and down; the time stated above is generally the month fixed for it. Last year being a season of unusual heavy rain, the navigation was open until January 1820.

“The commodities carried from hence are salt, cocoanut, sugar, beetle nuts, dates, both dry and fresh, brooms, cocoanut shell, hooka bottoms, earthenware, pepper, spices of all sorts, and curry stuff; and sometimes when there is a scarcity, wheat, rice, and paddy. The returns are mowda, honey, timber, rafters, bamboos, bamboo mats, and sometimes till, ghee and hemp.

“The above information is from some of the most intelligent merchants who have traded for thirty-five, twenty-five, and twenty years up and down from this to Tulluckwara and Deygaum Peeplia; these men go themselves every year in their boats, and always assist the boatmen in navigating their vessels.

Further information is contained in the Journal forwarded by Lieutenant Mathias in 1820.

“Here* I once more embarked on the 2d May, but in a larger description of boat, being nearly thirty feet in length, 2d. Lieut. Mathias' Journey in 1820. three and a half in width with a flat bottom; the other that I had for my people was in every respect like an English boat, with a keel, &c. &c., and it drew two and a half feet water. The only interruption I received from this to Baroche, even at this advanced time of the year, was at the Bawapeer and Tantee Dag Ghauts, where the large boat was detained a few minutes by the shallowness of the water, so that there is an uninterrupted navigation for the largest description of boats that sail in the river as far as Peeplia, thirteen miles above Tulluckwara, during the rains, and for two months after it; but from the hilly and broken nature of the country, Tulluckwara is the highest situation up the river that could be fixed upon as a depôt, particularly as there is a good cart road from that to Chiculda by Barsnee, Odeypoor, Rajpoor, and Cooksee, or by Barsnee, Paul Mahaul, Parmwaur, Rajpoor, and Cooksee, by that making the

* At Tulluckwara.

greatest possible distance for the land carriage to Chiculda or Dhair 115 miles. But several miles would be saved by going to Loossaree, leaving Cooksee on the left hand; and again by not using the more frequented road by Oodeypoor but that of Paul Mahaul and Pansour, from which I have no doubt that the distance of the land carriage from Tuluckwara to Chiculda, as we become more familiar with the road, would be reduced to a hundred miles."

The following Journal of a voyage up the Nerbudda in the Honorable Company's Pattimar "Tapy," by Lient. Elwon, Honorable Company's Marine, received in 1822, will be also interesting in this place.

"Sailed from Baroche, June 24th, and anchored at Jerresul, where
 3rd. Lieut. Elwon we were obliged to remain during the following day,
 in 1822. there not being sufficient water on the Jerresha Ghaut. On the 26th cleared the Ghaut, and passed through the Pora Ghaut without meeting with any more obstruction, in the evening anchored at Ramnapore, found the river here very narrow with a continual strong ebb tide. On the 27th, entered the Bowapearra Ghaut, and employed warping until the evening of the 29th, when we cleared it. I am informed the freshes begin to come down about the latter end of May, or beginning of June, and this part of the river remains navigable until the middle or latter end of September. The freshes continue seldom more than three days at a time, after which the water decreases, never leaving less than one fathom water at Bowapearra Ghaut; although it is fordable in the fair season, being dry or most water three feet, when troops often cross. This day entered the Amraully Ghaut, and employed warping during the following day, when we cleared it; and on the 1st July passed with little difficulty through the Nurkurry Ghaut, and in the afternoon anchored at the entrance of Cottarar Ghaut, there being no wind. Not being able to proceed, I returned in the Bunder boat to Chaundode, one of the largest villages on the banks of the Nerbudda; it has a very convenient landing place with steps built of bricks and chunam, which has a very good appearance from the water. It has some trade with Brodera, carrying there timber, for which they receive cash. To Baroche they take mowa in considerable quantity, also honey and ghee, receiving in return rice, wheat, dates and salt; they carry up the river as far as Mokree, in small canoes called toonies, salt, native cloth, pick axes,

brass dishes, and Brodera rupees, in return for which they receive bamboos, rafters and timber, which track along the bank of the river to Chaundode. The two following days employed warping through the Cotarrar Ghaut, where the bottom being hard sand and stones interspersed with rocks towards the banks, and the tide very strong, we were obliged to back the warping anchor with the boat's small anchor. On the 4th of July, while at anchor off Toomree, there being no wind, we were visited by the Jemadar, who said the country hereabouts is much infested by thieves; he has a guard of ten sepoy. Toomree is a small village; there is excellent pasturage in the neighbourhood. I saw some good cucumber plants and Indian corn here. Wheat I understand is not cultivated at all up the river. I observed hackeries at this place, the wheels of which were superior to any of the sort I have seen in other parts of India. In the afternoon a breeze springing up, made sail, found as we approached Tulluckwara, the tide considerably stronger, and although a pleasant breeze, were obliged to resort to the warp to gain the landing place. On 5th and 6th, employed gaining information which was but scarce, as the people apparently knew of nothing out of Tulluckwara; not even the Patill could tell me any thing of the surrounding country that I could at all think satisfactory.

“The following are questions answered by two matchies, or pilots, at Tulluckwara:—

“*Question.* What time does the water begin to increase here?”

“*Answer.* About 1st June, when the rains commence, and then rapidly.

“*Q.* When does it become very low?”

“*A.* After the rains, or end of September, when it soon decreases, having no more than two feet and six inches water at Tulluckwara in the hot season.

“*Q.* When do the large boats come from Baroche?”

“*A.* End of July or beginning of August.

“*Q.* Are those boats larger than the Honorable Company's Patti-mar Tapy?”

“*A.* No; about the same size, or fifty candies.

“*Q.* Do they go higher than Tulluckwara?”

“*A.* No, the only boats that go above this place are small canoes or toonies.”

“*July 7th*, having made the necessary preparations, Mr. Zigler and self proceeded up the river in the Bunder boat, with six extra hands, to assist in towing, also accompanied by the pilot in a canoe; found the tide soon after leaving Tullukwara so strong, we were obliged to track the boat, and this could only be done by the people wading through the water. At seven, entered the Busseean Ghaut, a few minutes afterwards observed a curious rippling in the water on the larboard bow. In passing this place close, I was surprised to find the water formed a number of whirlpools, hauled the boat close round, and on towing about ten yards found her prevented proceeding by the rapidity of the tide, and it was with difficulty the boat was kept from dropping astern. The pilot now directed she might be taken further out as there was not sufficient water ahead; this we succeeded in by securing the boat to some chinny we were amongst, but the water was running with more force, and it required great exertion for the people to stand and save themselves from being carried away; this would have happened in all probability had it not been for the chinny which assisted them, and also answered to catch a turn with the boat's painter. The men exerted themselves much, and seemed determined to overcome this obstruction to our progress; but I found after a long trial, their endeavours were quite ineffectual, although I had twelve men on the boat's painter. I asked Mr. Zigler his opinion on the spot, and as I found him the same way of thinking as myself, I determined to return, and in a few minutes we were out of this perilous situation.

“On the 10th, made a second attempt with no better success. On the 11th, as the water had risen considerably, and five hands ($1\frac{1}{4}$ fathoms) water on the same parts of the sand banks abreast of Tullukwara, I endeavoured again to get up the Bundur boat, but the tide was too strong even here, (where I expected to meet with little tide from the quantity of chinny.) that the boat, with sails up and eight oars out, dropped astern. It is worthy of remark, that the Gunner a short time after this, who I had forgot was not aware of the difficulties I had met with, was directed by me to proceed up the river and place flags on the North side while I went up the opposite side. He took it for granted he was to go up in the boat, to do which he had to go through the Ghaut, where, after endeavouring about two hours, he was not a little surprised to find himself obliged to return.

The Basseean Ghaut is nearly a mile from Tulluckwara, and has a stony and rocky bottom; the water runs with such rapidity, that I have no hesitation in saying, it is impossible for a boat to overcome it at this time of the year, and had I been able to have got through, I still never should have dreamt of reporting it navigable after the difficulties I met with.

“From this time I commenced the survey of the river downwards. Tulluckwara stands close to the river side on the top of a high bank, the landing place, the South-east side of the town, and has a steep ascent, very difficult to surmount in wet weather; the fort has but three sides, being open to the water side. There are one hundred and fifty infantry and fifty cavalry residing within the walls; the remaining ryots live outside. There is only one boat belonging to Tulluckwara, which is for passengers. The Putell (Boman) informed me there are not more than fifteen hackries in Tulluckwara, and that in the finest time of the year, they cannot go up higher than Gurneysur, which is said to be only three coss from Tulluckwara. I was also informed the freshes rise sometimes to an extraordinary height; that they never remain there more than nine days, when the water decreases, leaving not more than eight hands water (two fathoms) at Tulluckwara. I was not able to get any information respecting the roads between this and Mhow.

“After meeting with many difficulties from the freshes, which often carried away our flags, and caused great detention, we reached Bundarea on the 24th, and were compelled to remain three days by the freshes. On 27th, I was informed of the arrival of the Rajah of Naundode at Jawur, a village close to where the vessel was at anchor; I shall merely say I paid my respects to him. On the 1st of August, anchored abreast of Chaundode, many of our people on the sick list, principally through fatigue; questions answered by the merchants of Chaundode:—

“Q. Do you trade to Mokree and above?

“A. Yes.

“Q. When does the trade commence between Chaundode and Mokree?

“A. In November (Cartig mina) and lasts until the end of February or beginning of March.

“ Q. What articles do you carry there ?

“ A. Cloth, salt, and spices.

“ Q. What do you bring away ?

“ A. From Dunneer, (above Mokree,) spars about eighteen feet long (fit for boat’s masts,) and from Mokree, rafters and bamboos.

“ Q. What places above Mokree have your boats been at ?

“ A. With distances from each other.

Southern side of the river,	{	Soolpan, 3 miles above Mokree.	} Rajpeplia.	
		Dankerrah, 2 ditto above Saulpan.		
		Shemokeree, 3 do. above Donkerrah.		} In the Bheel country Parwee
		Warmong, 3 do. above Shanokeree.		
North side of the river,	{	Dunneer, 3 do. above Warmong.	} Raja Ker Dun- nee.	
		Wargaum, opposite Mokree.		
		Guddur, 4¼ miles above Wargaum.		} Rajpeplia.

“ Q. What description of boat can go up to Mokree ?

“ A. Toonies drawing two hands water (three feet,) when loaded can go up as far as I have ever traded (to Dunneer.)

“ Q. How do you get your boats up from Chaundode to Mokree ?

“ A. Tracked up ; the sails are of little use then, the wind being mostly down the river.

“ Q. How many men do you put in your boats then ?

“ A. Eight, ten and twelve.

“ Q. Does the water run with great force then ?

“ A. Equally as strong as in the month of July, 6, 7 and 8 miles an hour.

“ Q. How much water in Chaundode Ghaut in the dry season ?

“ A. Three hands ($\frac{3}{4}$ fathoms.)

“ Q. How do you get your boats up the Mokree fall ?

“ A. They are emptied of their contents, and then hauled up the fall.

“ Q. How many men are necessary to get the boats up the fall ?

“ A. Twenty.

“ Q. How far have they to go before they can be reloaded ?

“ A. From eight hundred to a thousand feet ?

“ Q. How is your merchandize transported that distance ?

“ A. On men’s heads.

“ Q. Have they any hackeries at Mokree ?

“ A. No ; the country is too mountainous.

“ Q. Can men be procured about Mokree to assist you with your boats ?

“ A. Plenty, at three and four annas per day.

“ Q. What water at commencement of the fall ?

“ A. Two hands (three feet), and above Mookree fall 4, 5, 6, 8, 10 and 12 hands, (as much as three fathoms.)

“ Q. How do you act coming back over the Mookree fall ?

“ A. Empty the boats at the fall, and as there is not then sufficient water to float the boats for about four or five hundred feet, they are launched along a smooth bed of stones, which are very slippery, being covered with a grassy substance, and they are guided down the fall with little trouble, when the boats being reloaded, proceed with ease to Chaundode in two and three days.

“ Q. Have you ever seen or heard of boats in great danger of being lost going up the fall ?

“ A. No.

“ Q. Can boats go up above Dunneer ?

“ A. Yes.

“ Q. Why is trade not carried on above that place ?

“ A. Because of the thieves, who would not pay above half the price they would bargain to give for what we carry.

“ I have measured one of the boats at Chaundode employed in the trade to Mokree and above. Her length twenty-two feet, breadth four feet and ten inches, depth two feet, her bottom quite flat.

“ *August 20th.* Reached Linnore, learnt there is a trade to Mokree and above, their cargoes are carried to Chaundode in large boats, when they are put into the toonies and proceed as afore-mentioned.

“ *August 25th.* Entered the Bowaparra Ghaut, where we met with much difficulty from a heavy fresh and unfavorable winds. On September 1st, we reached Ramnapore, since which time we got pretty well, until the fresh commenced, which compelled us to return to Baroche.”

Lieutenant Anderson (the report of whose journey between Mund-
4th. Lieut. Ander- leysir and Tulluckwara has already been given,)
son in 1842. concludes the account of his trip as follows:—

“ I embarked at Tulluckwara on the morning of the 5th, and arrived

at Baroche on the 7th, having performed the entire journey from Mundleysir in twelve days, not including the delays at Chiculda and Kukranuh, and I am convinced that I should have accomplished it in less time, had I been permitted to proceed altogether by water.

“ The following extract from the report drawn up by Captain Dangerfield, and to be found in Appendix II, of Malcolm’s Central India, gives some valuable and interesting information regarding the bed and vicinity of the Nerbudda, and may well find a place here.

“ The banks of the Nerbudda for a considerable distance between Mundleysir and Chiculda are from forty to seventy feet high, and consist, independent of a thin upper layer of rich vegetable mould, of two distinct strata of alluvium the upper which is very light coloured, contains a great quantity of indurated marl, and is strongly impregnated with muriate of soda or common salt, which the natives extract by lixiviation and subsequent evaporation by the sun, in shallow compartments near the banks, and sell it to the poorer classes, particularly the Bheels in the neighbourhood. This stratum is usually from thirty to forty feet thick.

“ The one on which it reposes, and from which it is divided by a strongly marked horizontal line, and a difference of colour, (this last being of a redder hue,) contains a very large proportion of carbonate of soda in general, but slightly contaminated by the muriate. This bed rarely exceeds ten or fifteen feet thick, and rests immediately on the basalt forming the bed of the river. In the dry season, both these salts form a thick efflorescence on the surface of the bank, and this alone is collected by the natives. That from the lower bed forms an article of export for the use of the washermen, &c. &c. ; but the soda itself is not extracted like the common salt, nor is its value but in the above way known.

* * * * *

“ The bed of the Nerbudda, consisting as already remarked, for a considerable portion of its course of basaltic rocks, gives rise to numerous shallows and small falls. Of these, the three principal are, one at Deyree, where the river is much contracted : a second at Semadarah, a little below Mhysir ; and a third at the Hurn Pahl, or Deer’s Leap, below Chiculda : whence, till its entrance into Guzerat, the stream

finds its way contracted to within half its usual breadth between two hilly ranges, and its course being much impeded, so as to render navigation impracticable, by large masses and elevated ridges of the rock.

“Passing higher up the stream from Mundleysir, the Northern bank, after about thirty miles, becomes rocky and precipitous, and consists of gently inclined beds, chiefly of green stone slate, containing interposed mica in small grains. But the island of Mundatta and part of the opposite bank appear mostly to consist of horn stone slate of a reddish or greenish grey, and sometimes porphyritic. Above this for a considerable distance is, on each bank, a very wild woody tract, resembling that already noticed below Chiculdah, excepting that the river is in general deep, and less obstructed by rocks.

“This part consists of a succession of low hills and deep ravines and water-courses, is covered with high thick forests, and is scarcely capable of being travelled in most parts for seven or eight miles from the river by any but foot passengers. Iron ore abounds; but the country being almost desolate, it is only smelted at Kantcole and Chandgurh, for the supply of the Indore and neighbouring markets. It is of a good quality, but from the imperfect mode of working, the metal is little valued, excepting for common purposes. The hilly tract below Chiculdah is better populated, chiefly by wild Bheel tribes; and nearer Broach on the Southern bank are the Rajpeely hills, inhabited by the Coolie tribe. In these hills are situated the several cornelian mines, of which a concise account has been given by Doctor Copland, in the first volume of the Bombay Literary Transactions. From Burwae to Chiculdah, the whole valley, from the Satpoora to the Vindhya mountains, is nearly level, well watered, cultivated, and inhabited.”

Supplement to Note on the Navigation of the Nerbudda River.

To make the Note more complete, a few extracts have been made

Vide Note at the end. from a paper on the Nerbudda river, by Lieut.

E. P. De l'Hoste, 16th Regiment, N. I. to be found in the Volume of Transactions of the Bombay Geographical Society, from 1836 to 1838.

The information afforded by Lieutenant De l'Hoste, although procur-

[Of Portion II.]
6. Lieut. De l'Hoste
in 1829.

ed by him in 1829, will best find a place here, as it relates only to the portion of the stream between Soolpan and Tulluckwara. This officer

informs us that he left Tulluckwara in April 1829, with the intention of following the course of the river towards its source as far as he could. He got as far as Soolpan,* at which point he writes, that "the stream of the river from being from 60 to 100 yards broad, suddenly narrows to about 60 feet, and on each side is hemmed in with steep precipices; the middle of the river is also studded with large rocks, and the stream, even at this season, rushes through the intervals with surprising rapidity, dashing large pieces of wood which were floating down from one side to the other with a force which no boat could have withstood, neither indeed, would it be possible to steer a boat in such a rapid current through such a tortuous and narrow channel. Both banks are precipitous and covered with thick jungle, and all further progress is rendered impossible."

Regarding the stream at Mokree Ghaut, where he descended into the bed of river, he says, "at this place there is a ridge of rocks stretching completely across the river, which is nearly one hundred yards broad, causing a fall of about 12 feet in height. I took the opportunity of bathing in the river, the water of which was perfectly clear. The force of the current was such as to compel me to hold on by the large rocks, of which the river is full below the fall; the bed was covered with large round pebbles, rendering it difficult to walk."

At the village of Goragaum (about $5\frac{1}{2}$ miles below Mokree,) he says, "that the course of the river appeared impeded by rocks, through which the stream passed with a continued gurgling sound, that could be heard at a considerable distance."

At Gurreysir, distant 6 miles from Tulluckwara on the right bank, he crossed the stream in a good sized boat, and writes as follows regarding this part of the river: "Beyond (*i. e.* above) this village, the river appeared full of large rocks, the passage for the water between

* Vide Transactions of the Bombay Geographical Society, from 1836 to 1838, No. VI. p. 174.

“ which was barely three or four feet, the total breadth was 80 yards at this point, and the depth of water where I crossed (in the centre of the stream) 18 feet, measured with a pole; the right bank was low, level, and slightly covered with jungle. * * * The left bank on the contrary, was precipitous and rugged towards the river, but towards the South, numerous ranges of hills covered with jungle were visible. These hills form the end of what is called the Sutpūri range. I may add, that as far as Soolpan, the features of the country were similar.”

Between Gurreysir and Tulluckwara, “ the road lay over a level and well cultivated tract of black soil; the course of the river was visible the whole distance, and offered no impediments whatever to navigation; the depth ascertained from the guides, varied from twelve to fourteen feet.”

A. SHAKESPEAR,

Assist. Secy. to Govt. N. W. P.

Some original Passages on the early Commerce of the Arabs. Communicated, by Dr. A. SPRENGER, B. M. S.

The Academy of Berlin offered some years ago a prize for the best treatise on the commerce of the Arabs during the first three centuries of the Khalifat, and the question has been answered in such a manner, that the Academy awarded the prize to one of the candidates. The prize essay has indeed the merit, that there are collected in it most of the materials which were within the reach of the author; that is to say, passages from original works which had been translated and printed. But out of the thousands of Arabic manuscripts, which are preserved in European libraries, not fifty have been translated. This prize essay is therefore merely to be considered as a nucleus to which those who have access to unedited sources may add new materials.

We may expect to find very detailed and exact information on the Arabic commerce; for early in the third century of the Hijrah, several works have been written on the commerce of the Korayshites. One of the authors of such a treatise is the celebrated historian Madáyiny. I have, however, never met with any quotation from these works, and if

Azraky, of whom we possess a history of Mekka,* gives no extracts from them it is very likely that every trace of the information which Madáyiny and other diligent traditionists have gathered, is lost.

Abú 'Othmán 'Amr Bin Mahbub Kenany Jáhiz الجاحظ † a man of great learning, but of a very eccentric tendency of mind, wrote a book on commerce كتاب النظرة في التجارة which is frequently quoted by Novayry, who died in A. H. 732, (A. D. 1331,) and it appears therefore, that copies of this interesting book were still extant in the fourteenth century. It seems, that most of the extracts which I have collected on the commerce, flow originally from the same source, the work of Jahiz.

The object of this Memoir being merely to publish inedited fragments, the information which Masudy Edrisy and other authors give, whose works have lately been published, can find no place in it.

I propose to give in another Memoir, some further notices on the commerce of the Arabs with China and Polynesia, and of their geographical knowledge of the South seas.

I.—A passage from Ibn Khordadbeh.—On the Mercantile Roads.

Abú-l-kasim 'Obaydullah Bin Abdullah Ibn Khordadbeh, flourished towards the end of the third century; this author has been the object of considerable controversies among the orientalistis of Europe. Yet the two principal, nay, only passages on his life, having escaped even the learning of De Sacy, it will be interesting if I insert here one of the two; the other is contained in the second part of Al-mas'údy, and I shall therefore translate it in the progress of that work.

In the Fihrist (MSS. of Paris, folio 202, recto,) which has been written in A. H. 377, the following notice is given of Ibn Khordadbeh:—

ابوالقاسم عبید الله بن احمد (sic) بن خرداذبه وكان خرداذبه
مجوسيا يسلم علي يد البرامكة فتولى ابوالقاسم البريد والخبر بنواحي
الجبيل ونادم المعتمد وخص به وله من الكتب كتاب ادب السماع
كتاب جمهور انساب القوس كتاب المسالك الممالك كتاب الشراپ
كتاب اللهبو والملاهي كتاب الانوا كتاب الندماء والجلساء

* There are several MSS. of this ancient work in Europe, one is at Cambridge which has been left by Dr. Burckhardt, who in the preface to his Travels in Arabia, professes to have largely made use of it.

† Jahiz died in A. H. 255, (A. D. 868,) at an age of ninety-six years.

“Abú-l-kasim Obaydullah Bin Ahmed (thus the name of our author’s father is written in the Fihrist) Bin Khordadbeh. Khordadbeh, (the grandfather of our author) was a Magian, and was converted to the Islam by the Barmakides. Abú-l-kásim (our author) was consequently appointed over the post and intelligence (spy) department in the provinces belonging to the Jebal, subsequently he came to the court of the Khalif Mo’tamed (who came to the throne in A. H. 256,) and became one of his privy counsellors. He wrote,

“1. *Æsthetical observations on Music*; (Mas’údy gives a very interesting extract from this work in his life of Mo’tamed.) 2. On the most celebrated Genealogies of the Persians. 3. On the Roads and Kingdoms; (this is, the title of the Geographical work from which I derived the following extract.) 4. On Drink. 5. On Playing and Amusements. 6. On the Stars.(?) 7. On Courtiers and Companions.”

The geography of Ibn Khordadbeh is the only work which we still possess of this author, and of this there is only one copy in Europe. The MS. in question is ancient, bearing the date of A. H. 630 (A. D. 1232,) but it wants in most instances the diacritical points. It is preserved in the Bodleyan Library at Oxford, (No. 993,) and has been transcribed by the author of this Memoir for his own use in 1838, and from this transcript, the following passage is derived:—

التجار اليهود الرانية الذين يتكلمون بالفارسية والرومية والعربية
والافرنجية والاندلسية والصقلبية فانهم يسافرون من المغرب الي
المشرق ومن المشرق الي المغرب برا وبحرا يكملون من المغرب الخدم
والبحاري والغلمان والديباج والجلود والنخز والسيوف ويركبون من
فرنجة في البحر الغربي فيمخرجون بالفرما فيكملون تجارتهم علي ظهر
الي القلزم وبينهما خمس ايام وعشون فرسخا ويركبون البحر الشرقي
من القلزم الي الحجاز وجدّة ثم يمضون الي السند والهند والصين
فيكملون من الصين المسك والعود والكافور والدار صيني وغير ذلك
مما يكمل من تلك النواحي حتي يرجعوا الي القلزم ثم يتكلمون
الي الفرما ثم يركبون في البحر الغربي وربما عدلوا بتجاراتهم الي

القنسطنطينية فباعوها وربما صاروا بها الي ملك الفرنجة فيبيعوها هناك وان شاوا يركبوا بتجاراتهم من فرنجة في البحر الغربي فخرجون بانطاكية ويسيرون علي الارض ثلاث مراحل ثم يركبون في الفرات الي بغداد ثم يركبون في الدجلة الي الابله ومن الابله الي عمان والسند والهند والصين كل ذلك متصلا بعض ببعض *

Here is a lacuna in my MS., in which instead of copying the Arabic text I wrote a few lines in a German translation, of which the meaning is given in the English version added to this text. After that, my copy continues:—

بحر رومي فيعشرهم ملك الروم وان شاوا ساروا في نهر الصقالبة فمروا بخليج مدينة الخزر فيعشرهم صاجها ثم يصيرون الي بحر جرجان فيخرجون في اي سواحل احبوا و قطر هذا البحر خمس مائة فرسخ وربما حملوا تجارتهم من جرجان علي الابل الي بغداد

فاما مسلكهم في البر فان الخارج منهم يخرج من الاندلس ومن فرنجة فيعبر الي سوس الاقصى فيسير الي طنجة ثم الي افريقية ثم الي مصر ثم الي رملة ثم الي دمشق ثم الي كوفة ثم الي بغداد ثم الي بصره ثم الي الاهواز ثم الي فارس ثم الي كرمان ثم الي السند ثم الي الهند ثم الي الصين وربما اخذوا طريق ارمنية (?) في بلاد الصقالية ثم الي خليج مدينة الخزر ثم في بحر جرجان ثم الي بلخ وما ورا النهر ثم الي تغرغز ثم الي الصين *

Translation.

“ The Jewish merchants called Raniens, who speak Persian, Rumiish, Arabic, Spanish and Sicilian (Italian,) travel by land and sea from East to West, and from West to East. They export from the West (from Europe,) male and female slaves,* soldiers, brocades, beavers and swords; they sail from the country of the Franks on the Western

* The Bishop of Arles wrote a book against the Jews to Charle-Magne, in which he accuses them of stealing and forcing away Christian children, and of transporting them as slaves to Spain and Africa.

sea (Mediterranean,) and disembark at Ferma, from thence they transport their wares by land to Kolzom, which is a distance of five days' journey and twenty farsangs. From Kolzom they sail in the Eastern sea to the Hijaz and Juddah, thence they proceed to Sinde, India and China. From China they export musk, aloes, camphor, cinnamon,* and other articles which are exported from that country; with these they return to Kolzom, and from this harbour they carry their goods to Ferma, where they put them on board the ship to sail in the Mediterranean, either to Constantinople where they sell off, or they go to the country of the Franks and sell their wares there.

“There is another road. If they choose they bring their goods from the Mediterranean to Antioch, to which town they have to transport their goods by land, only three days' journey. Then they go down the Euphrates to Bagdad; then they go on to Tigris to Obollah; thence they sail to 'Oman,† Sind, India and China, for all this is one uninterrupted road for navigation.

“The Russian merchants who are of Slavonian origin, export the furs of beavers and of black foxes from the most distant part of the Slavonian country, and bring them to the coast of the Rumish sea (Black sea,) where the Greek emperor levies customs on them. Or if they chose, they go in the river of the Slavonians (Wolga,) and they pass in the Gulf, the town of the Khazar, where they are taxed by the Khazar king (who was a Jew,) and thence they continue their navigation into the sea of Jorjan (the Caspian,) where they land in any

* “From China,” says Cosmas Indicopleust. (Cap. xi.) “silk, aloes, caryophyllum and tzandama are exported.” The centre of the commerce of the South sea appears from the same author to have been Ceylon. At Ceylon there are vessels from “Æthiopia, India and Fars. It has also commerce with Mala, from which pepper comes, and with Calliana whence metal (æs,) various sorts of wood (ligna,) sesamum and stuffs for dressing are exported, and with Sinde which exports musk or castorin and androstachys.”

† The Jehannuma (A Turkish work on geography, printed at Constantinople A. D. 1731, p. 543,) contains the following list of articles which are to be found at 'Oman

مسک زعفران بقم ساج عاج لؤلؤ دیباچ جزع یاقوت ابنوس نارنجیل
قند و سندروس صبر حدید رصا حیزران غضار صندال بلور فلقل
دارچینی قرنفل نیل عود و انواع اقمشه عنبر شروب جلود نمور *

coast they like. The length of this sea is five hundred farsangs. Sometimes they transport their goods on camels from Jorjan to Bagdad.

The following are the land roads of the merchants: they proceed from Spain or France, and set over the Straits to Sus el-aqsa; from thence they proceed to Tangiers; thence to Ifrikyah; thence to Egypt; thence to Ramlah; thence to Damascus; thence to Kúfah; thence to Bagdad; thence to Basrah; thence to the Ahwaz; thence to Fars; thence to Kerman; thence to Sinde; thence to India and China.

Sometimes they go by the land road of Armenia (?) in the country of the Sclavonians; they proceed to the gulf of the town of the Khazars; thence they sail on the Caspian (to the mouth of the Oxus); thence they proceed to Balkh and Ma-wará-n-nahr; thence to Taghozghoz; thence to China.*”

II.—Extract from the Kitab-et-boldan.—On the Mercantile Roads.

The following extract has been copied from an Arabic MS. of the British Museum, (add. MSS. N. 7496, folio 75, recto.) This volume contains a very interesting work on geography, which as it appears from its contents, was composed in the fourth century of the Hijrah. The author's name is not mentioned, but in the fly page an opinion is expressed, that it is an extract from *Bilazory's Kitab Fotúh al-boldán*. This opinion is not founded, for the work is not as ancient as Bilazory; moreover, I have read the *Kitab al-Fatúh* of Bilazory from one end to the other, and I found that the two books have not one sentence in common.

The geographical work in question is the best Arabic work on geography I know of. It contains in most instances the history of the

* El-Mas'udi gives some details respecting this road to China, (vol. i. p. 333.) From his account it appears, that there is a path from Samarkand over the mountain, now called Kara Tagh and the desert. The distance of this way to the Chinese frontier was forty days journey, but it was dangerous, and camels could not be taken on it. The caravan road which avoided the mountains and desert was four months' journey.

The latter road was known to the ancients. Cosmas gives even the distances, though not very correctly. The distance from China to Persia (Balkh) is according to him, 150 days' journey to thirty miles each; the way through Persia was eighty days' journey; the road from Nisihis to Seleucia (Bagdad) was thirteen days.

In another passage (Vol. II, p. 138,) Cosmas says, “If you go from Persia to China by land, you have a much shorter way, for this reason you always find a large quantity of silk in the Persian markets.”

places which are described in it; the relations of one city to another, the ancient Persian name, interesting pieces of poetry, &c., yet it has hitherto escaped the notice of the learned, owing no doubt to the scarcity of MSS., for to my knowledge there exist only two copies of this book in Europe; the one in the British Museum which is ancient, correct and clear, having almost all vowel points, and one in the East India House, which if I recollect right, has Number 617. Haji Khalfa seems not to have been acquainted with the book.

On comparing the following passage with the passage of Ibn Khor-dadbeh which precedes, we cannot doubt that they both flow from the same original source, as we have said above. We compose the decomposed rays of light to obtain again uncoloured truth.

الري واليهما يقع تجارات ارمينية واذربيجان وخراسان والنخز وبلاد
برجان لان تجار البحر يسافرون من المشرق الي المغرب ومن المغرب
الي المشرق فيحملون الديباج والنخز الفايق من فرنجة الي فرما
ويركبون البحر الي القلزم فيحملون ذلك الي الصين ويحملون
الدارصيني والماميران ومتاع الصين كله حتى يصيرون بالقلزم
ثم يتكولون الي الفرما وهم التجار اليهود الذين يقال لهم الرهدانية
يتكلمون بالفارسية والرومية والعربية والافرنجية فيجيون الي انطاكية
ثم يصيرون الي الابللة ثم الي الغداذ فاما تجار الصقالية فيحملون
جلود الثعالب وجلود النخز من اقصى صقلية فيجيون الي البحر
الرومي فيعشرهم صاحب الروم ثم يجيون في البحر الي سمكوش
اليهود ثم يتكولون الي الصقالية ثم ياخذون من بحر الصقالية حتي
يجييون الي خليج النخز فيعشرهم صاحب النخز ثم يصيرون الي
البحر النخرا ساني في هذا النهر الذي يقال له نهر الصقالية فرما
خرجوا بجرجان فباعوا جميع ما معهم فيقع جميع ذلك الي الري
واعجب من هذا انها فرضة الدنيا

Translation.

“ *Ray*.—This town is the centre of the commerce of Armenia, Azerbaijan, Khorassan, Khazar, and the country of Borjan. The sea merchants sail from East to West, and again from West to East, and they export brocade and a superior sort of beaver from the country of the Franks to Ferma by sea, (from Ferma they go by land,) to the Red Sea and take their wares by sea to China, from China they export cinnamon, mamyrán, and all sorts of China goods. These they bring to the town of Kolzom, whence they transport them by land to Ferma.

“ The merchants of whom we are speaking are Jews, and are called Rodhanians. They speak Persian, Rumish, Arabic and Frankish, (*i. e.* a dialect of German,) they come (by sea) to Antioch, thence they go to Bagdad and thence to Obollah.

“ The Sclavonian merchants deal in fox and beaver skins (fur,) which they bring from their most distant countries to the Rumish sea, where they pay custom to the Greek Emperor. Then they proceed by sea to Samkúsh, who is a Jew, then they go (by land) to the country of the Sclavonians; then they sail on the Sclavonian sea till they come to the Gulf of the Khazars, where they have to pay custom to the Khazar king. Then they sail on the sea of Khorassan, and ply on the river which is called the Sclavonian river; sometimes they go on shore in Jorjan and sell off. All these wares come to Ray, which is the market of the world.”*

* The latter part of this passage is very confused and corrupted, but it may easily be corrected from the passage of Ibn Khordadbeh.

Besides Ray, the town of Jyroft in Kerman, two days' journey from Sirjar and four days from Hormuz, was a great place for commerce, in which the caravans of Sijistan and Khorassan used to meet. (*Ibn Haukal MS. of the Bodleyan Library.*)

(*To be continued.*)

Route from Derá Ghazeen Khan to Candahar, through the Sakhee Sarwar Pass and Buzdar, with other routes. By Major R. LEECH.

Derá Gházee Khán.—Charratta 9 miles, 200 houses, 2 wells, $6\frac{1}{2}$ miles from Derá Gházee Khán, the Sharga canal crosses the road. It is thrown off by the river 9 miles above at Gurmanee, and waters the country 5 miles below at Págá; at a mile further the Mániká canal crosses the road. It is thrown off by the river at a place called Chainwállá, 27 miles above, and extends 25 miles to the South to a place called Hawair.

Wador, through } 9 miles, 400 houses, 1 well 112 feet deep.
brushwood.

Pakhee Sarwar, a } 18 miles, { A large village { Water brought
stony road. } and a mausoleum. { from a spring in
the mountains 5
miles distant.

Siree, 14 miles through an uninhabited road, a desolate fort, a fine stream; the Pass commences 4 miles out of Sakhee Sarwar by a steep descent; it then runs through a ravine, whose bed is covered with large stones. It is commanded by the steep faces of the hill. The mountains have been deserted on account of the frequent attacks of these mountaineers; viz. Jetá Omalánee and Biddá Amadánee; both however under the command of Jalá Khán Logháree.

Ascent of the Sulliman range (Kalee Koh,) at a place called Ootpalana, or camel saddle: some say from the shape of the hill: some say from the steepness which causes even a saddle to fall off in the ascent.

This is a zig-zag road for horses and camels, the face of the mountain covered with loose stones that each shower brings down. There is an easier road to the south that goes to Racknee, but not for a moment to be reckoned a gun road.

A table of 5 miles, and } 10 miles. { 40 reed huts of
a descent of the same } Lánjánee Kathryáns } A rivulet.
to a place called Rack- } under Ameer Hajee }
nee. } Khan of Darazoo Kote. }

The gun road from the Deráját to Rackee enters the mountains from Sangad, and is as follows:—

Sangad, commencement of the Pass.

Fort of Koh, 16 miles, 50 houses of Jaths, a stream and valley.

Lodr-wád, 14 miles, scattered huts of Buzdárs }
of the Báckaree clan, under Pandee. } The above stream.

Ambar, 13 miles, a granary of the Buzdars } Ditto ditto.
and Sadhwánees in caves.

Manjawal, 14 miles, uncertain habitations of } Ditto ditto.
Buzdar shepherds.

Rackee, 12 miles, a good gun road. From Sangad to Candahar is a gun road.

There are quantities of grain, wheat, rice, and barley in Ambar, Darázoo in Bárackam, Chotyáley, Tal Dukkeede; in fact on the whole road, water is plentiful as well as firewood, except at Bagháó and Smalan.

There are sheep to be procured along the whole road. Camels are procurable at Tal Bárackam, Kholloo and Pishing; the inhabitants are quiet.

Racknee.

Darázoo-ká-Kot, the residence of Hajee Khán and 40 Kathryans.	} 20 miles.	} A large village } 600 houses. } A stream from Kholloo called Han, as well as rain water.
Kooh, the head of Han stream.		

A difficult steep narrow ascent and descent. Nika-panee 12 miles; no habitations, sufficient water for drinking.

Fort of Dost Mahmomed Khán, a level road from the former stage.	} 5 miles,	} 200 houses of } Zarkán Patháns. } Rain water in wells.
Fort of Fazul Khán....		

Ditto ditto, Aly Khan,	1 mile,	100 ditto ditto.	Ditto ditto.
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Chotyáley over hills, } passable to camels } and horses.	} 36 miles.
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There is no water to be met with on the road, except in most inconsiderable quantities and uncertain places, which however, when found, is too salt to drink.

The remaining gun road from Racknee to Candahar is as follows:—
Racknee.

Chobará,	} 4 miles,	} 200 houses of } Ishyane Kathry- } ans under Mahar } and Dakoo Ma- } laks. } A rivulet, as well as water in tanks.
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Darázóó Kót,	16 miles,	before described.
Kooh, the head of } the Han stream,	} 5 miles,	} before described.

For Chapper, or black hill, not to be passed,	10 miles,	{ No habitation, a rivulet.	{ The road level, a slight ascent ; soap stone met with.
Bálá Dákai, a hill which is turned, the road leading through the bed of the stream.	8 miles,	{ No fixed habitations ; shepherds sometimes come here for a few months.	
Lwang, or ford knee deep. The stream called Hanokee.	6 miles,	no habitations.	
Palyáne,	14 miles,	{ 20 habitations of Zarkan Pathans un- der Sahab Khan, who is under Fazla Khan of Kholoo.	
Chotyaly,	12 miles,	{ 400 houses of Tareens under Biland Khan. ...	{ Water from Barie.
Sobhá Khán's fort,	1½ mile,	{ 200 houses of Ustu- ryanees,	{ The former rivulet.
Tal, famous for wheat which is produced to a great extent, ...	12½ miles,	{ 700 houses of Tareens under Sobhá Khan, Fai- zullá Khan, Hazár Khán, Abdullá Khán, and Baboo Khan,	{ Ditto ditto and tanks.
Dukkeer or Rah,	14 miles,	{ 400 houses of Ta- reens under Gul Raz,	{ Water from Bagháó, plen- tiful cultiva- tion.
Bagháó,	10 miles,	{ 600 houses of Dhumad Kákads, under Hasam Khán and Peraz Khan.	{ A stream rises here.
Sinzávee,	7 miles,	{ 300 houses of Dhu- mads,	{ A spring of water.
Chinjan,	11 miles,	{ Uninhabited ; in the neighbourhood are (Zikhpel Dhumads, ...	{ A stream, from which a few acres are culti- vated.
Chadee,	11 miles,	{ A few houses of Sanatyá Kakads, ...	{ A stream, in the bed of which the road runs.
Karez,	8 miles,	{ 300 houses of Sa- natyá Kakads,	{ Spring of wa- ter.
Ingand,	9 miles,	{ 60 houses of Sa- natyá Kakads,	{ Sets of springs.
Bazar in the valley of Pishing, }	13 miles,	{ 30 houses of Bat- tezai Tareens, under (Paidá Khan,	{ The river of Surkháb.

Gulistan Karez, sixteen miles, before described. This road is a gun road. Hajee Khán Kakad brought two guns with him from Candahar,

and engaged the Tareens of Tal. Hajee Khán could secure protection, he said to an army passing by this road.

No. 2.

The road of Rod Bahár, from Beebee Nanee in the Bolan Pass to Kalát.

Beebee Nanee Jam and Baradee, twelve miles, 100 houses of Puj Belochees; they do not pay tribute to Mehrab Khan, and are generally employed in guarding caravans through the Pass of Bolan. The water is in mountain springs. Rice, wheat, barley and juwaree are cultivated here, and there are gardeus of mulberries, apricots, peaches and grapes. Indeed, the fertility of this road may be inferred from its name, Rod Bahar, signifying the valley of spring. From Beebee Nanee, the first six miles is in a plain. The road then enters the Pass, which is 150 yards wide, in which a half-hid stream runs; the two villages of Jam and Baradee are off the road, on an elevated plateau; the next stage is Zer-i-Kotal, "foot of Pass," a distance of twenty miles. There are no habitations here, nor on the road. The stream at the stage is plentiful. After leaving Jam Baradee, the valley opens out to the breadth of three miles, in which the tamarisk tree forms a jungle, and in which plain the water is lost. The Pass is then formed again, and the water again appears at four miles distant from the foot of the Pass. The stage is level; on the top of the Pass three-quarters of a mile from the bottom are the ruins of an old town, the streets of which are still to be traced, and several sunken spots denote the site of wells or reservoirs. The natives have searched in vain for old coins. The city is said to have belonged to Giours, (Greeks?)

The road from the old town then descends a little, again ascends, and finally has a considerable descent, and takes a level nature, and a third descent to Sar-i-Deh. A collection of wild fig trees, and water in stagnant pools, a distance of eighteen miles; this stage goes by the name of Rod Bahar; it is supplied throughout its length with water, and is cultivated in patches of wheat, rice and juwáree; peaches, apricots, mulberries, &c. also abound in small gardens. In this stage there are about 400 houses of Puj Mughandovee and Kulovee Brahins, who are cultivators. Firewood is plentiful. The next stage is Irarmookh, four miles, inhabited in the summer by Brahín shepherds; viz. Ladies, Jatooees and Kulooees, to the amount of 150 tents. The

water is in three wells, and the cultivation depends on the rain. This stage is out of the Pass. Narmookh is in a plain which is divided from the plain of Takht by a projecting range of hills. From Narmookh, the next stage is Takht, fourteen miles, inhabited only in the summer months by wandering shepherds. If rain falls, water will be found at Takht; the next stage is Johan, fifteen miles, a fort containing 30 houses of Johanees under Katar Dad, the son of Sábab Khán Johánee. The water here is in a running stream.

Rice and wheat are cultivated to some extent, and there are a few gardens. The next stage is Kishán, twelve miles, containing 10 houses under Jangee Kishanee.

The water is in a running stream; rice and wheat are cultivated to some extent, and there are a few gardens and cultivation.

Kalat is thence 15 miles.

This road is passable to cavalry and camels, but by no means to guns. Snow does not fall in the Pass, its boundary being Narmookh, (Narmool of maps.) The inhabitants begin to emigrate to Catchee (Cutch Gundava,) by the middle of September, some on account of the cold, others on account of the scarcity of grass for their flocks, and the remaining cannot stay behind, as they would be too weak to withstand the plundering attacks of the Dhumad Kakads.

The heaviest falls of snow in Kalat do not cover the ground knee-deep, and it never remains on the ground for more than seven days. Snow begins to fall in the beginning of December, and lasts to the end of February.

When the inhabitants of Rodbar emigrate to Cutchee, they first bury their grain, and cover it very artfully, so as to escape observation. The inhabitants return to Rod-Bahâr by the end of March. Wheat is sown in the end of August, and reaped in the beginning of April. Rice or the rubbee crop is sown in the middle of May, and reaped in the middle of September.

There is grazing ground on the mountains for flocks during March, April and May, and forage for horses might be procured; during May the wheat stalks could be given to horses, and as long as it lasted.

No. 3.

Road from Manziljah at the entrance of the Bolan Pass to Kalat Manziljah in the Dasht Khurd, or small plain, called Bedoulat; there are

no habitations here, neither is there water. It is said, however, to have been brought by Meer Naser Khan, Brahin chief of Kalat, from Zada-khoo, a spring ten miles to the north, by means of a small duct to furnish the army of Ahmed Sháh Duranee. From Manziljah to Marow is ten miles, over a level road having only one slight hill. This village contains 500 houses of Koodds, under Sardar Alá Dinna. There is plenty of good spring water; wheat and juwaree are plentifully cultivated. From Marow to Isplinjee is ten miles over a level road. The water is in springs; the village contains 500 houses of Bangulzains, Brahins under Noor Mahommed Wadera, (Patel.) From Isplinjee to Koohak is sixteen miles over a level road, the water is in wells, the village is only inhabited in the summer, as are the other villages on the road to the extent of six hundred houses of Bangulzais or Badoozaís, who pay taxes to the Mahommed Shahees, the owners of the soil.

From Koohak to Gazah, a set of worked springs in the district of Mangochur, twenty-four miles, a level road having no water or habitations on the way.

Mangochur is three miles distant to the right. It contains 2,000 houses of Langaus. It is under Kalat. From Gazah to Karez (spring) of Giranee is ten miles. There is a spring called Shireenah, four miles from Gazah. The road is level. Karez-i-Giranee contains in the winter 30 habitations, and in summer two hundred of mixed Brahin tribes; the water here is remarkably good, compared with that of Kalat. From Karez-i-Giranee to Kalat is eight miles. The last three miles being through fields and gardens.

No. 4.

Road from Kot (Kwettah of maps,) to Kalat from my Journal.

18th June, 1838.—Left Kot, the road passing between two hills, and reached Saryab, a distance of seven miles. There are no habitations here. The water is in worked springs, in which are a quantity of fish. This is an extremely cold place in winter. A report prevails, that two caravans, one of indigo and one of madder, proceeding to Hindustan were caught in a fall of snow, the madder merchant offered to burn his madder if the other would share the cost. The indigo merchant refused, encamped at a distance, and perished in the night from the cold.

19th June.—Passing a hill at four miles from Saryab entered a plain, and keeping along the skirt of the hills to the left, to avoid the deep

rugged "nullas" that cut up the lower plain, reached Pilingabad, a further distance of 8 miles. The town of Teeree is in the neighbourhood. Pilingabad contains about 300 houses of Affghans, and is surrounded by fine gardens of apricots, almonds, mulberries and grapes. The former grow to the height of English elm-trees, and the vines are trained up them.

21st June.—Marched four miles and a half to Mastung, a walled town, situated in a wilderness of gardens. It contains about 3,500 houses, and a Naib, or governor, on the part of Mehrab Khan, generally resides here. Mastung is famous for its melons. The inhabitants in the neighbourhood are Mashwanees and Sangoos, and a sprinkling of the different other tribes of Sarawan Brahmes. The seasons of Mastung are twenty days in advance of those of Kalat.

The direct road from Mastoony to Kalat, is then viâ Mangochas as follows :—

Mastoong Cha (well of Guroo situated in the kad vale of Mastoong.)	} 12 miles,	{ No habitations. The road is per- fectly level.
Mungochar,		

.. .. 16 miles, before described.

This road is only chosen when express is required, on account of the distances between the watering places.

The other road, the same by which I travelled, is as follows :—

26th June.—Left Mastung and marched by the round about road to Kalat, halted at Shireenab, no habitations. The water is in worked springs, and salt to the taste. The distance is twelve miles. The neighbourhood abounds in hares.

27th June.—Marched seven miles to Karez (worked springs,) of Dost Mahomed. The road running through a valley ; thirty habitations ; some cultivation.

28th June.—Marched nine miles to the Zyarat (Mausoleum) of Zard, twenty houses inhabited, and the like number in ruins. At a half mile in front is a garden, the fruit of which was this year destroyed by a blight.

29th June.—Marched eight miles to Sar-i-Karez ; no habitations except twelve in ruins, a small stream. Mangochar was visible to the left.

30th June.—Marched sixteen miles to Zyarat, a village containing 200 houses. Mehrab Khan's stud is stationed here.

1st July.—Marched four miles to Kalat. This road is a gun road throughout.

No. 23.

Route from Dadur to Sukkur via Shikarpoor, Quarter Master General's Office, Camp at Larkhana, 23rd December, 1839.

Stages.	Distance.		Remarks.
	Miles.	Fur- longs.	
Dadur.			
Nowsherra, ..	7	4	Vide route from Gundava to Dadur.
Myhysir, ..	15	3	At nine miles cross a deep nulla from Nowsherra, with little water in it, but muddy road; good water in a nulla South-west of the village. Myhysir contains about 200 houses and 10 shops, plenty of forage for camels, and kirby for horses; encampment on the North-east of the village.
Bhag,	14	6	In this march cross six nullas, one of which has water in it, road good, and cultivation of juwaree in the vicinity of this place; water bad, and from a tank filled in by the fall of rain. Bhag is a large place, with plenty of supplies, it contains about 2,000 houses and 100 shops, forage for camels in the vicinity of this town, and kirby for horses; juwarree fields all the way from last stage; encamping ground on the East of the village.
Kassim-ka- joke,	20	6	Cross five nullas in this march, one of which runs on the left of the road with pools of water in it, road good, with cultivation of juwarree on both sides at some places. This village is small, with 75 houses and 8 shops; supplies limited, plenty of forage for camels, at one mile from the village, and kirby for horses; encamping ground South-west of the village.
Kunda,	15	7	In this march cross five nullas, with one running on the left of the road, as before; road a foot-path, and bad cultivated fields of juwarree on both sides of the road. Kunda is a small but good village, with about 200 houses and 30 shops; water in a nulla on the left of the village till the end of February, when it could be had by digging in the bed of the nulla; plenty of forage for camels and kirby for horses; encamping ground South-west of the village.
Carried for- ward,	74	2	

Stages.	Distance.		Remarks.
	Miles.	Fur- longs.	
Bro. forward,	74	2	
Rojan,.. ..	35	3	At five miles three furlongs pass the village of Roree, where the guns were halted, and from whence desert of twenty-six miles is crossed; road good on a plain all the way. Rojan is a poor village, with few huts, water bad, and in three wells built of burnt brick, no supplies of forage for camels and kirby for horses; encamping ground South-east of the village.
Janeederrah, .	11	2	Road good from the last march. Janeederrah is a small ghurry, in which Commissariat supplies are stored and guarded by a party of infantry from Shikarpoor. This village is deserted; water in five wells, two of which are now dry; sufficient forage for camels and kirby for horses, supplies very limited; encamping ground on the East of the village.
Jagghan, ..	11	5	In this march pass four dry nullas, road good. Jagghan is a small village with 60 houses and few shops, water from five kutcha wells, forage for camels in abundance, and kirby for horses, supplies very limited; encamping ground on the South-east of the village.
Shikarpoor, ..	12	2	Road good, through thick jungle; having no nullas to cross in this march. Shikarpoor is a large town, with considerable supplies and population; encamping ground on the South-east of the town, where there are several wells.
Kheahyee, ..	14	7	In this march cross eight dry nullas, road good through jungle. Kheahyee is a small village with about 100 houses and 8 shops, supplies few, water from two pucka and ten cutcha wells; plenty of forage for camels and kirby for horses; encamping ground on the South-east of the village.
Sukkur... ..	13	3	Cross 17 nullas in this march, road good, but through thin jungle. At seven miles on the left of it, the river Indus is met, and on the right bank of which Sukkur is situated. It is the Head Quarters of the Brigade in
Total,	173	0	Upper Scinde.

(Signed) NIEL CAMPBELL, Major,
Acting Quarter Master General.

No. 24.

Route from Sukkur to Larkhanah, Quarter Master General's Office, Camp at Larkhana, 23rd December, 1839.

Stages.	Distance.		Remarks.
	Miles.	Fur- longs.	
Camp Sukkur. Bangudjee, ..	10	0	In this march pass four dry nullas, road a foot-path, but good through thin jungle; 10 houses and 1 shop, water from the Indus, and encamping ground on the bank of it; plenty of forage for camels and kirby for horses.
Shaleanee, ..	8	2	Pass eight dry nullas in this march, road a foot-path through thin jungle, and leading through the bank of the river; 20 houses and 4 shops, river water, and encamping ground on the bank of the Indus; plenty of forage for camels and kirby for horses.
Muddehjee, ..	9	5	Pass seven dry nullas in this march, road a foot-path through thin jungle, leaving the river at about three miles from the last stage. About 150 houses and 20 shops, water from six pucka wells, supplies plentiful; encamping ground on the South-west of the village. Lots of forage for camels and kirby for horses.
Nowaderah, ..	9	4	In this march pass seven dry nullas, road a foot-path, through jungle. About 100 houses and 8 or 10 shops, water from four or five pucka wells. The river is left about three miles from this place; supplies plenty; encamping on the N. W. of the village; forage for camels and kirby for horses.
Larkhanah, ..	12	3	Cross nine dry nullas in this march, road good through thick jungle.
Total, ..	49	6	Larkhana is a large town with abundance of supplies.

(Signed) N. CAMPBELL, Major,
Acting Quarter Master General.

No. 25.

Route from Kotree and Gundava to Sukkur on the Indus, Quarter Master General's Office, 19th December, 1839.

Stages.	Distance.		Remarks.
	Miles.	Furlongs.	
Kotree,	Vide route No. — from Larkhana to Dadur.
Gundava,	7	0	Ditto ditto.
Oodauna,	14	7	A walled village with considerable cultivation around, water from cutcha wells, outside; at this time scarce and insufficient for a small force. The road good, over a level desert plain, crossing a large canal at six miles, twenty yards broad and fifteen feet deep, with steep banks; cultivation commences at one mile from Oodauna. Forage abundant, supplies few.
Kunda, . . .	10	4 $\frac{1}{4}$	A large walled town, water in canals but indifferent, much cultivation and several other villages around, at a distance of from one to three miles. Road over a level country, but more bushy, passing one village on the right at three miles and the ruins of old Oodauna, with some cutcha wells, and two or three large villages on left, at seven miles. Supplies plentiful at Kunda.
Burshooree, ..	9	2	Two walled villages, with considerable cultivation around, on the edge of the Runn desert; water from small cutcha wells, road good all the way, and for the first two and a half miles through cultivation, then a desert plain until within one and a quarter mile of Burshooree. Forage abundant, but few supplies.
Rojan,	26	0	Two walled villages on the eastern side of the Runn, or desert, with a little cultivation, and one good pucka well. The road over the Runn is very good. Parties with laden cattle should march just so late in the evening, as to arrive across it by day-light. Forage abundant, few supplies.
Janedera, ..	11	2	A large square fort and a village, the village at present in ruins, having been destroyed some time ago, by a plundering
Car. forward,	78	7 $\frac{1}{4}$	

Stages.	Distances.		Remarks.
	Miles.	Fur- longs.	
Brought forward,	78	7 $\frac{1}{4}$	band of Beloochees. There is considerable cultivation around, and some of the population scattered in huts in the fields. There are four good pucka wells, one of which is inside the fort. Khangaum, a large and populous place, is about four miles to the northward, at present an out-post from Shikarpore, road good, except at the 9th mile where it is deep in sand. Forage plentiful and some supplies.
Jaghan,	11	4 $\frac{1}{2}$	A fort and village with some lofty square fortified buildings, outside, considerable cultivation and some good pucka wells. The road is over a level but more woody country, passing two or three villages on the right and left. Jaghan has a small but good bazar, with considerable supplies, and forage plentiful.
Shikarpoor, ...	13	4	A large town or city, the capital of Upper Scinde, with extensive bazars and abundant supplies. A large fort on the east side of the town, the buildings are in general lofty, the country around an extensive level, bushy plain, with much cultivation; water plentiful from wells. Road good, over a level, but very bushy or jungly country.
Kahee,	14	$\frac{1}{2}$	A large village, and also much cultivation. The road winds a good deal over a level, but very bushy or jungly country, with many fine clumps of trees, and several villages at a distance from the road.
Sukkur,	12	6	To the bank of the Indus river near the flying bridge to Bukkur Killa. The road from Kahee is in general good, but crosses about 10 water-courses or nullas, all at present dry. Pass Thoomanee at 1 $\frac{1}{4}$ mile on right. Rubail on left, at 2 $\frac{1}{4}$. Durraha at 5 $\frac{1}{4}$, and Soomar at 6 $\frac{1}{2}$; both on right. Jaffrabad at 7 $\frac{1}{4}$ right; Nusseerabad at 7 $\frac{1}{2}$, on left; and Abad at 9 $\frac{1}{2}$, all small villages, with many trees, and considerable cultivation about them.
Total,	130	6 $\frac{1}{4}$	

(Signed) N. CAMPBELL, Major,
Acting Quarter Master General.

No. 26.

*Route from Shikarpoor to Larkhana, Quarter Master General's Office,
Camp Sukkur, 15th January, 1840.*

Stages.	Distances.		Remarks.
	Miles.	Fur- longs.	
Shikarpoor.			
Samun Kote, ..	4	2½	A small village; about 10 houses and 2 shops; water from two wells.
Nowser,	3	2½	Ditto; 30 houses and 6 shops, supplies limited; water from two cutcha wells.
Kamboowa, ..	1	5	This village contains about 20 houses and 1 shop; water of wells.
Khairr,	6½	This is a good village, of about 50 houses and 7 shops; water of wells in the village.
Gahay-ja, ..	4	3½	A good village containing about 100 houses and 12 shops; water of wells.
Bungool			Ditto ditto; 40 houses, 7 shops and
Dehra	2	6½	1 well.
Rambut			
Poora,	6	3	Ditto, ditto; 40 ditto, 3 ditto ditto.
Rahooja,	1	1½	A deserted village.
Nowadehra, .	2	7	A large town, abundant supplies. This village has about 100 houses and 10 or 12 shops; forage for camels and kirby for horses abundant.
Larkhana, ..	12	3	
Total,	40	1	

(Signed) N. CAMPBELL, *Major,*
Acting Quarter Master General.

No. 723 of 1840.

Secret Department.

To Major J. HOLLAND, Deputy Quarter Master General of the Army.

SIR,—I am directed to acknowledge the receipt of your letter dated the 18th ultimo, with a communication from Lieutenant Colonel

Campbell, Quarter Master General of the Army, forwarding a collection of plans and routes in Scinde and Afghanistan, collected and prepared by that officer, principally from his own surveys, and those of the Department under his charge, during the late campaign.

2. In reply, I am desired to state, that the Honorable the Governor in Council entirely concurs in the sentiments expressed by His Excellency the Commander-in-Chief, with regard to the highly creditable manner in which the whole of these maps and routes have been prepared.

3. I am further desired to request that the best thanks of Government may be communicated to Lieutenant Colonel Campbell, for the maps and routes in question, which form a very valuable and most acceptable addition to the knowledge which had previously been acquired by Government of the countries recently traversed by the British Army, and that that officer may, at the same time be informed, that the Governor in Council will have much pleasure in bringing the same to the special notice of the Government of India and of the Home Authorities.

4. I am desired to return the maps and routes for the purpose stated in the 3d para. of your letter, and to request, that when a general map of the nature therein alluded to, has been compiled, a copy thereof may be sent to the Political Department, and that the plans may be returned to Government, in order that copies of them may be made and forwarded to the Government of India, and the originals afterwards transmitted to the Honorable the Court of Directors.

I have the honor to be, &c.

(Signed) L. R. REID,

Chief Secretary to Government.

Bombay Castle, 4th May, 1840.

No. 17.

Route from Guznee to Derah Ismail Khan.

Stages.	Coss.	Remarks.
Guznee,		
Sheloghur,.. ..	6	A village, road good, water from a karez.
Wusta Joga,	5	A small village, good road, water from a karez.
Punna,	5	Ditto ditto, water from a karez, road good.
Kakajun,.. ..	5	„ „ good road, water from a karez.
Dund,	4	„ „ water from river, road good.
Zo-gun Shuhi,.. ..	6	„ „ road indifferent, water from a karez.
Hund-gaee	5	No village, road as last stage, water from a mountain stream.
Surgo,	4	A small village, water from a mountain stream, road through hills.
Kalogur,	5	Ditto ditto, water from river, road indifferent.
Otman,.. ..	4	No village, road bad, water from river.
Serae Mama Chular,.	4	Ditto ditto, road as before, water from river.
Shedan,.. ..	4	Ditto ditto, road indifferent, water from river.
Khír Dongur,	3	„ „ ditto ditto ditto.
Ahmed Shah Katch,.	4	„ „ road and water as before.
Turpurneea.....	4	„ „ ditto ditto ditto.
Passuk,	3	„ „ ditto ditto ditto.
Ispan Pae Kat, ..	3	„ „ ditto ditto ditto.
Lemlakut,.. ..	4	„ „ ditto ditto ditto.
Kata Raee,.. ..	3	No village, road very bad, water from a mountain stream.
Postcut,	3	Ditto ditto, road as before, water from ditto.
Shaedan	3	„ „ road and water as before.
Dangulraee,	3	„ „ road very bad, water from ditto.
Rumoo,	3	No village, road very bad, water in abundance.
Nelae,	4	No village, road and water as before.
Jeraee,	3	„ „ ditto ditto ditto.
Cheirjagarain,.. ..	3	„ „ ditto ditto ditto.
Majgurra,.. ..	4	A village, road good, water from a karez.

Stages.	Coss.	Remarks.
Soouk Deeval,	4	A village, road good, water from a karez.
Shumkool,	3	Ditto ditto ditto ditto.
Geraee Reman,	4	Ditto ditto ditto ditto.
Darabund,	4	A large town, water from a karez, road good.
Goondee Arim Khan,	4	Ditto ditto ditto ditto.
Metaee,	3	„ „ water and road good.
Dereh Ismael Khan,	7	A large town on the Indus.
Total,	136	

At least one month's supplies require to be carried along with an army, forage for horses and camels is abundant throughout. The road is represented to be easy for troops and carriage. The road at Kota Kae, and from Dangulraee to the foot of the ghaut at Maj-garra, will be found difficult for artillery.

*To Captain Alexander Burnes, on a Mission to Cabool, &c. &c. &c.
Loodhiana.*

SIR,—In obedience to the accompanying instructions received from Lieutenant Leech, I most respectfully beg to hand up a report on the great Pass of Bolan, examined and carefully drawn up in as plain and concise a manner as possible, and hope it will meet with your approbation.

I have the honor to be, &c.

Bhag, 22d August, 1838.

(Signed) JAMES NOCK,

Draftsman to Lieutenant Leech.

Report on the Great Bolan Pass. By JAMES NOCK, Draftsman to Lieutenant R. Leech, Bombay Engineers, Assistant on a Mission to Cabool, &c. &c. &c.

Every cafila from Khorassan destined to Cutchee, Shikarpoor, and Scinde, frequenting the Great Pass of Bolan, go through Shawl, and those from Mastung are generally composed of a body of men, waiting for the arrival of a cafila to Bolan, or of different tribes of Brahin Baloochs,

emigrating from Kelat, and its subordinate places to Cutchee, in failure of rain to procure pasture for their flocks and cattle, and find means of subsistence by cultivation, in a more favored and watered country, near to their own.

2d.—The entrance to the Pass of Bolan does not show any striking appearance. From Mastung, leaving Feerungabad to the left, the road takes a direction N. E. 60° , meeting the hills at 3 coss, where there is an ascent and descent of $\frac{1}{4}$ coss, road not in any way difficult, composed of earth and small stones; thence Minguljah 9 coss, in a plain, and no water here. From Shawl to Siriab Hills 4 coss, and plenty of water, bearing N. E. 80° ; thence to Minguljah the halting place. Caravans and any body of men travelling from Mastung, should be careful in having a good supply of water for a 12 coss journey.

3d.—Leaving Minguljah to the commencement of the Pass is a distance of 3 coss back, bearing to Mastung S. W. 65° and to Shawl N. W. 100° . Having here reached the Pass, you meet an ascent and descent of 200 and 100 paces, a cross road from Murravee Spilingee and Kelat also join, a description of which also follows. Bolan then takes a 65° N. E.; the breadth between the hills or heights on both sides is about 200 yards, the sides and hills just near rise about 200 yards high, not accessible at its immediate part, but footmen can ascend from the parts round about; the places being exposed, the heights also are not so commanding as to obstruct the passage of a body of men; even cannon can be managed to be mounted on both sides. The road is a gradual descent, mixed with loose stones and earth, $\frac{1}{2}$ coss; one coss further on are to be seen three trees on the right side of the hill, where there is a spring, and water can be procured a mussuck-full at a time; thence $1\frac{1}{2}$ coss further, a path-way strikes apart from the road, to a place called Doosan, a watering place, and also leading to the resort of robbers, composed of Dhumad Kakads. $\frac{1}{4}$ a coss further on, is Doosan-ka-moo, where cafillas from Mastung and Shawl halt for a short time. Water is procured from $\frac{1}{2}$ a coss by a road or ravine running to the left to the above mentioned place; this place is better known by the name of Mamadgozee.

4th.—From Mamadgozee, or Doosan-ka-moo, the road takes a S. E. 100° direction, and narrows at the corners to 70 feet, and both

sides of the hill, after a sweeping space, meet at the distance of 150 yards, making a Pass of 50 or 60 feet breadth; the heights are lofty, but accessible; there are eight windings, measuring on the whole 1350 yards, the centre of the spaces between the windings is about 300 yards, bearing N. E. 20° to S. E. 170° . This place is called Seree Bolan, thence 60° N. E. 200 paces, the heights mingle with the hills, and the sides become a gradual slope from the hills; thence $\frac{1}{4}$ mile distant is Mooch or Sir Kujoor; springs of water, running stream, underneath; breadth between the sides 600 feet, heights much exposed, and no difficulty of access, good road of loose stone and earth; a fixed halting place of cafillas.

5th.—From Mooch or Sir Kujoor the direction is S. E. 120° , $\frac{1}{4}$ coss distant, the heights to about the right $\frac{1}{2}$ a coss, leaving but a bare bank to mark the road, to the left a running stream of water. This place is called Koolee; thence S. E. 115° $\frac{1}{4}$ coss, Khakeedawoo a burial place, are to be seen, a great number of graves of those slain in protecting caravans against the Dhumad Kakads and Marees. To the left is also a date tree, and a chokee in ruins; plenty of water. The road is rough and difficult from large loose stones, and the unevenness of the ground; but a party of pioneers could soon remedy the evil, by removing the stones, and filling up the rough parts. S. E. 147° , $\frac{1}{2}$ a coss is Ahleegoom; the water here disappears under-ground, and on that account gives name to the place. Road as above and the same remark, hills to the right, distant 3 coss, and left 8 coss, leaving an immense plain.

6th.—S. E. 155° , $2\frac{1}{2}$ coss road in a plain; 1 coss to the right is Khu-jooree; 60 houses of Koochak and Pooshy Baloochs, and 2 coss further on is Jam and Barurdee, 80 houses of Koochak and Poosjh Baloochs; thence S. E. 165° , 4 coss, road to Beebee Nannee. The hills near, again leaving an entrance of about 300 yards. A river of the same name runs here, two feet water, heights on both sides 300 and 400 feet high, accessible on all parts; halting place of cafillas.

7th.—The hills again turn off on both sides, leaving a wide plain to traverse to Kirtah, 130° S. E. 6 coss. About $\frac{1}{4}$ of this road you meet a detached hill on a rising ground, and a passage of about 20 feet, called Tillowgheer, which place could be avoided by keeping to the left. Kirtah contains 40 houses of Koochak Baloochs under a chief named Futteh Khan, who murdered his nephew a few months back to secure

himself his possessions. A river runs here, three feet water, and it is a halting place of cafillas.

8th.—From Kirtah due south is Sang Soolah 3 coss, one of which is an ascent and descent, a passage of 200 yards between the hills, the heights are bare and exposed on all sides; crossed the river twice, also river Gundruff 250 feet wide and 3 feet water; the hills on both sides rise 150 and 250 feet, road not very difficult and 400 feet broad. 175° S. E. 2½ coss, crossed the river three times, bed of the river rather rough from loose stones, 2 feet water and 200 yards wide. Due south ¼ coss is Kuftáree Chirak, crossed river, road difficult as above, 400 feet wide. S. E. 125°, the road narrows to 150 feet, the heights easy of access, 100 and 150 feet high, 200 yards, ascent called Pas Pash; crossed river, 3 feet water. S. W. 150°, 250 yards in length, having crossed the river three times, 2 feet water; due south Kohn Dil, and crossed the river three times. Cafillas halt for awhile here to refresh, 200 yards.

N. E. 45°, 400 yards descent; the road is 600 feet broad, heights 150 and 200 feet high, accessible on all points. N. E. 35°, 200 yards ascent, place called Kohee Singh.

N. E. 45½ coss Drubbee, halting place of cafillas, heights not in any way difficult of ascent, breadth of the road 200 feet.

Hence to the termination of the Pass S. E. 100°, 1 coss, the hills take a N. W. and S. W. direction, and the river towards Daddur ¾ of a coss South. Daddur from the mouth of Bolan is about 35° N. E. 3 coss distant on low ground, and on open plain.

The established cafilla march is from Mastung and Shawl to Established cafilla, Minzulzah 12 coss; no water here except at Si- marches in Bolan. riah, 3 coss from Shawl.

2nd Stage.—Next Mooch or Sir Kujjoor 9½ coss, plenty of good water, and the road generally a gradual descent.

3rd Stage.—Hence Beebee Nannee, 7½ coss, 6 of which no water to be found, arriving at Beebee Nannee plenty of water from river near.

4th Stage.—Hence Kirtah 6 coss, plenty of water from river.

5th Stage.—Drubbee, 8½ coss, having to cross the river very often, and many ascents and descents.

6th Stage.—Daddur, 5 coss in Cutchee, making a distance in all of about 50 coss, every allowance for windings, &c.

On the whole, the passage through Bolan cannot be considered

very difficult. Between Mooch and Bebee Nannee you meet with a rough road for about 2 coss or so, and also on the way to Drubbee, which obstacle can be soon remedied by a body of Pioneers, in removing the stones and levelling the road. About Mamudgozee and Teree Bolan, the road is narrow, yet there is sufficient passage of 62 and 70 feet wide for a body of men; also the ascents and descents show but small impediments, the heights likewise on both sides are not commanding; and however defended, would produce little effect in opposing an army. Shah Shujah passed the road on to Candahar with 14 guns, 10 drawn by bullocks, 3 pairs to each gun, and four by horses, 2 pairs to each; and encountered little or no difficulty in the way.

This season, owing to the failure of rain, the depth of water in the River and depth of water; expedients resorted to by Shah Shujah in cases of great depth in passing the Bolan. river did not exceed 3 feet, else at other times at Pos Pash, there used to be 4 and 5 feet water, and a rapid running stream. Shah Shujah passed from Daddur to Drubbee and Kohee-Dil in the cold season, and on account of the depth of water being 4 feet in the passage, procured a great number of labourers, and levelled and dug the high grounds in the bed of the river, and causing the stream to run more freely, thereby obtaining a small depth of water to ford the river with his army and guns. A better gun road for artillery, cavalry and infantry can seldom be met with, and favourable under any circumstances to the passage of a large army.

At the entrance of the Pass, there is a cross road bounded by a good pass of sides 50 and 100 feet high, direction S. E. 120° $1\frac{1}{2}$ coss long, then a valley in the same direction 2 coss, also an ascent and descent of 2 coss over a mountain; very rough road, from huge stones. This part requires to be levelled, and the large stones blown up by gunpowder; thence S. W. 30° over a perfect plain 3 coss to Muravee; 500 houses of Koord Balooches under Ullahdeena, &c. 2 coss further on is Splingee; 700 houses of Bungulzaee Baloochs, under chiefs Noor Mahomed Wuddeia and Jan Mahomed; living on the produce of their lands. These two places is two stages distant from Kelat.

There are no habitations on the road to Bolan except at Kirtah, between Mooch and Beebee Nannee. There are three Villages situated near the pass; leaders' names; number of inhabitants, &c. villages, named Kujjooree of 60 permanent mud houses of Koochak, Pog, Pooshy and Mungundoee

Baloochs, situated 1 coss right of the road; and Jam and Barurree 2 coss right side of the road, and distant 3 coss from Kujjooree and Beebee Nannee, containing 80 houses of Koochak Poshy, Pog and Mungundooee Baloochs. The chief of Koochak, Poshy and Pog Balooches is Futteh Khan of Kirtah, and of Mungundooee Baloochs is Bhawul Khan, residing at Nurranook and Rodhway, among the hills south of Bolan, about 7 coss distant. He has about 250 Mungundooee and Koolee Balooches under him, and Futteh Khan of Kirtah is the chief of 300 of the tribes above described, leading peaceable lives, and find subsistence by cultivation.

Round about the Pass of Bolan to the south are the Bolan Marrees, 350 in number, having no fixed habitation, and moving from place to place

Number of tribe,
leaders' names; habits,
&c. living distant from
the Pass.

where pasture can be found for their cattle and flocks. They are under Durreh Khan, Peeraz and Suttuk Khan, infesting the road and plundering

cafillas and travellers. They are deadly foes to the Hunanall Patans, living near the hills about Shawl, under Shurreef Khan and Sahebzadda, 450 in number, leading peaceable lives.

North of the Pass are the Hunnanal Patans mentioned above; next is the famous freebooter chief Shah Boojruk. He has about 600 Dhumad Kakads under him, all noted robbers, and a dread to cafillas and travellers, plundering where they can reside, at Largoongur 10 coss among the mountains; also 1000 Dhumah Kakads under Nasseer Khan, son of the late Secunder Khan, also living by plunder, and infesting the Pass. Their place of abode is Cohast and Gurmode, 12 coss N. W. of Beebee Nannee.

Azeem Khan Baroozee is the chief of 400 Punnee Patans. He resides at Sang among the hills, 8 coss from Kirtah; he has 5 cannon; he lately held the situation of Naib of Seewee. Sang is said to be a well-fortified fort, having high walls, and in a good state of preservation; these people lead quiet lives.

Baddra, under Sayud Khan Baroozee, contains 60 houses of Punnee Patans, situated 13 coss north-east of Kirtah, leading peaceable lives.

The Marrees, under Dodha of Kahan, 4000 in number, they are professed robbers, and infest the Pass. Kahan is situated about 20 coss from Daddur, among the hills. For the last year, they have not committed any depredations about the Pass. Mehrab Khan, it seems, has made

some arrangements with Doshá Kurnae, the residence of Pusund Khan, who is in the service of Kohn Dil Khan. He is also the chief of ten independent forts, consisting of 8000 inhabitants of Mukkeenna and Chilgurree Patans, living peaceable lives. These places are 10 and 15 coss N. E. from Daddur among the hills.

Seewee is about 7 coss east of Daddur, subject to Candahar: can muster 4000 men of Kujak Kakads, Punnee Patans and Seelaune Balooches.

The season of the year most unfavorable to cafillas, and to the movements of troops is from the latter end of July to the middle of September, during which time there are three or four falls of rain, which causes the river to swell for a few days, after which it subsides, and falls to its usual depth of 4 and 5 feet the farthest. This season for want of rain, the river has fallen so low as 1 and 2, in few places 3 feet.

During the day the weather is oppressively warm, and travellers experience great fatigue and suffering on that account; and from what I have seen and felt, I would not advise travelling through Bolan in the hot months, except in cases of extreme necessity. The nights also are very hot. After leaving Mooch, shelter from the sun is not to be met with, especially for a large body of men.

Forage for cattle and other animals of burthen is got from the hills, near and round about Bolan: the plain also affords good grazing land, in an ordinary season of rain. The Pass itself, and its immediate vicinity, can find grass and forage for any number of cattle and horses, even in this season. If there be no rain and scarcity, grass is to be found about the parts along the road. The description of grass found about Bolan is similar to the hay given to horses in Hindostan; and to camels and bullocks a peculiar shrub growing wild, called *stoomby* by the natives, and another called *trat*, considered strengthening, and a good substitute for camel thorn and leaves of trees.

Provisions and grain are not to be had in the Pass. An army passing ought to be particular in procuring a good supply for a seven days' journey at the least through the Pass, barley or jow for horses and mules, wheat for camels and bullocks.

Barley, wheat, jowaree, rice, doomba (or fat tailed sheep,) goats, &c. can be procured from the towns and places in Daddur and round about.

From Kirta, Jam and Bomoree, Kujjoree and Rodhbar, near the Pass, 2000 khauvas of rice can be procured. Hurnaee, Cutchee, with Bhag and its subordinate places can furnish an army of 100,000 men, with a commissariat of provisions for many months; my informant tells me for years together.

Shah Shujah in one day obtained 1000 khauvas of wheat from See-wee as tribute.

Animals best adapted for carriage are camels for baggage, and horses for cannon; for tents and light burthen for quick passage, mules and yabboos would be preferable; bullocks also cannot be objected to even for cannon.

Animals of burthen best adapted for the passage of Bolan.

State of the Thermometer after leaving Kelat.

12th Augt. 1838.	{ 64 Morning, 90 Noon, 82 Sunset, }	Open plain of Mangochur and Koohuk.
13th Augt.	{ 64 Morning, 92 Noon, 88 Sunset, }	Road to Murravee, open plain.
14th Augt.	{ 64 Morning, 94 Noon, 88 Sunset, }	Muravee and road to Minzuljah, open plain.
15th Augt.	{ 70 Morning, 102 Noon, 94 Sunset, }	Minzuljah, Bolan, and Beebee Nannee, open plain.
16th Augt.	{ 84 Morning, 102 Noon, 94 Sunset, }	Beebee Nannee to Kirtah, open plain.
17th Augt.	{ 86 Morning, 102 Noon, 100 Sunset, }	Kirtah to Daddur or to Nowshera, open plain.
18th Augt.	{ 84 Morning, 100 Noon, 96 Sunset, }	Nowshera, in a close mud house.
19th Augt.	{ 84 Morning, 100 Noon, 96 Sunset, }	Nowshera, in a close mud house.

(Signed) JAMES NOCK.

Index to History of the Toorks. By BARON HAMMER VON PURGSTALL.

[The following is an abstract of the contents of Baron Hammer Von Purgstall's valuable History of the Toorks. It is translated from the original work in our Library by Dr. E. Roer, Librarian to the Society, and published by us as an Index which may guide the readers who may be in search of historical authorities to some which might otherwise escape them, as this excellent work is rare in India.—Eds.]

The Title of Baron de Hammer's Work is the following :

History of the Golden Horde in Kiptschak ; that is, of the Moguls in Russia, by Hammer Purgstall.

The work presents three divisions, the first of which contains the history itself in nine books. Each of these books is furnished with a title, while its contents are given on the margin.

The titles and contents of the books are as follow :—

First Book, (p. 1—33.)

On Kiptshak and its inhabitants previously to the invasion of the Moguls, especially on the Turks and their tribes. Contents: Plan of the work. Boundaries of Kiptschak. Kiptschaks the same with Patzinakites. Districts of Kiptschak. Its Towns and Inhabitants. The Turks. Turkish tribes in Kiptschak. Immigrations of a later period. East and West Turks. Turkish tribes. Continuation. The four principal Tribes. Customs of the Kiptschaks. Classes of the Tribes.

Second Book, (p. 33—94.)

On the Moguls, their national characteristics, first appearance (in history,) and on Tchengis Khan. Contents: The Moguls. Name of the Moguls. Description of them. Dschuweinis' description. Muned Schimbaschis' description. Form of the body and dress.

Their houses, food, wives. Sport, weapons. Character. Origin (descent) of the Moguls. The family of Tchengis-Khan, Temudschin. Temudschin's exploits in war. Further exploits of Temudschin. Battle at the fountain. Baldochune (1202) expedition against the Naimans. (1203.) Tchengis-Khan's expeditions (1206.) Chinese war (1210.) The Shaho of the Chuarems. The blood-vesper and carnages. Buchara's carnage in Transozana. Chuarem's flight and death. (Silkide,) 10th February, 1221. Rebiul-achir, May, 1221. Redschel, July 1222. Persian expedition. Expedition against Kiptschak. Rebral-achir, June,

1220. Ssafer, April, 1222. Battle on the Kalka. Distribution of countries and appointments (officers.) Tchengis' death, 18th August, 1227.

Third Book, (p. 95—143.)

The reigns of Batu and of his two first successors. Contents: I. Batu. The two hordes, price of gold. Ogatas becomes Grand-Khan. Expedition against Kiptshak, 1223. Schewwal, 21st December, 1237. The burning of Moskan. Carnage at Waldimir. Tschermaghun's expedition against Persia. Reduction of Kiew and of some Volhynsan towns. The Moguls in Poland. Battle at Chmielik, 18th March, 1240. Battle of Liegnitz, 9th April, 1241. Invasion of Silesia and Moravia. The Moguls in Hungary. Battle on the Saj's. The conquests of Grosswardein, Perg and Gran. Expedition through Dalmatia and Croatia. The Moguls in Austria. The first Russian prince in the camp of the Moguls.

Kujuk becomes Khan. Mergku becomes Khan. Silkide, February 1251. Reign of the Moguls in Russia. The grand-prince Michael murdered 1246. Russian princes in Batu's camp. Distribution of the Mongolian army in Russia, Sertak, Ulaghschi.

Fourth Book, (p. 144—181.)

The reigns of Berke. Contents: Berke. Warlike preparations, Schaaban, September 1254. Succession. Census. Burundai before Hatitsch. Hulagu's expedition in Russia. Irbil's conquest. The empire of Rum divided. Battle against Arikbugha. Scheich Seiffedin. Beheadings. The general of Noghai Berke. Expedition in Kiptshak. Division of the conquests. Halagu's death. Alaka becomes Khan. Russian princes in the camp. Kiptschak's relations to Asia Minor. Turkish colony in Dobrudscha. Tseddin's plan against the emperor. Berke's death.

Fifth Book, (p. 182—247.)

On the political institutions, that is, of the laws, religion, state of civilisation, finance, administration of justice, etiquette, dignitaries of court and officers of state of the Moguls.

Sixth Book, (p. 248—280.)

The reigns of Mengku Timur, Tudie Mengku, the Tetrarchia of Tulabuka, Skidschik, Alghui and Toghrul, and reign of Toktai to the accession of Usbeg.

Seventh Book, (p. 281—326.)

The reign of Usbeg, and expiration of the dynasty of the Blue horde.

Eighth Book, (p. 327—367.)

The reigns of Urus-Khan, his two sons, Tochtasmish Khan and the two invasions of Timur.

Ninth Book, (p. 368—412.)

The reigns of the Khans of the Golden horde, from the death of Tochtasmish Khan to its expiration.

Second Division, (Appendices.)

I. Extracts from the Menasirul-awalin of Aaschik.

II. The rain stone extracted from Mohammed B. Manosun's work on gems.

III. Invasions of Kiptschak by the Turks and Arabs, and expeditions of the Petscheneges and Polowzes, previously to the epoch of the Moguls.

List of the invasions from the commencement of the historic time, more complete than those in the Treatises of Sulm, Phumanr on the Kumans Polowzes, Tazyges, or in Schloezer's Chronicle of the Polowzes (in his history of the Germans in Transylvania) in Horvath's History of the Kumans, and in the Appendix on the Polowzes, as added to the instructions of Klaproth's Travels in the Caucasus and in Georgia, p. 32.

IV. The poem of Purbeha Dschami, with the addition of fifty Mongolian words.

V. Thirty-six diploms of Mongolian state-officers, (from the collection of state papers of Mohammed Hinduschar.)

VI. Venetian Treaties, with Dehanibeg and Berdibeg.

VII. List of Russian families, descended from the Tartars.

VIII. List of the names of Russian princes who entered the Tartarian camp, and a list of fifty succeeding Mongolian rulers in Kiptschak.

IX. List of names of Tartarian ambassadors in Russia.

X. Division.

Critics given by three Russian academicians on this work, and the author's reply.

A Grammar of the Cashmeeree Language. By Major R. LEECH, C.B.

1st Assistant Governor General's Agent, N. W. P.

(Concluded from p. 420.)

Adverbs of Time.

Az, to-day	Sulli, to-morrow morning
Yawa, yesterday	Kájis, at noon
Autra, day before yesterday	Sakale, in morning
Pagá ^h , to-morrow	Kuni-kuni, sometimes
Tami pagá ^h , day after to-morrow	Kaal uhyat, day after to-morrow
Pagá do ^h karit, ditto ditto	Duyami phiri, again
Parus, last year	Daadd, always
Yuhus, this year	Brinzaki pata, after an hour
Wuny, now	

Adverbs of Place.

Boaut, before	Kaut, where
Nibar, without	Yut, here
Path, after	Yati, hence
Andar, within	Hut, there
Thod, above	Ati, thence
Bou, below	Tout, there
Pyat, upon	Kun, toward
Tal, under	Tati, there
Kasheeri, to or from Cashmeer	Tatyuk, of there, (adj. m.)
Kati, whence	

Adverbs of Quantity.

Yoot, this much	Yootá dik, } whatever you give
Tyoot, that much	Tyootá nima, } I will take
Koot, how much	

Conjunctions, Interjections, &c.

Ta, and	Nah, no
Yá, or	(Chu na, is not)
Rats, without	Hato-ho, .. } holla
Sán, with	Hataho, .. }
Yudwai, if	Hatabá, .. } holla, brother
Yithai, even so, gratis	Hatasah, .. } holla, sir
Yina, .. } lest	Kami bapat, why
Yutna, .. }	Yut hyn, thus
Kits, . }	Bei, moreover
Puits, .. }	Kyuth, how
Bápat, .. } on account of	Kyázi, .. } why
Saati, .. }	Kouv khátra, .. }
Támat, .. } till	Athuk, but
Tány, .. }	Youkanikyá, because, for
Há, .. }	
Hou, .. } yes	
Ada, .. }	

VOCABULARY OF NOUNS.

Substantives with their Genders, and some of their appropriate Adjectives.

Nab, <i>m.</i> sky	Thod, high	Sáf, clear
Zoon, <i>f.</i> moon	Ráts, fine	Kátsa, full
Aiyit, <i>m.</i> sun	Taut, hot	Prezalawur, shining
Tsándar, <i>m.</i> new moon		Zauyul, fine
Táruk, <i>m.</i> star		Prezalan, shining
Gruhun, <i>m.</i> eclipse of sun		Lagán, is taking place
Kroan, <i>m.</i> ditto of moon		Lagus, has taken place
Táp pyun, <i>m.</i> sunrise		
Mandul, <i>m.</i> halo		
Rood, <i>m.</i> rain	Satá, much	Vyut, heavy. [cotton
Sheen, <i>m.</i> snow		Pamba seera hisha, like flakes of
		Bhambari, like slates
Doat, <i>m.</i> hail	Satá, much	Sakht, heavy
Shishar gant, <i>f.</i> icicle		
Tilakatur, <i>m.</i> ice		Pishul, slippery
Lawah, <i>f.</i> dew		Adár, damp
Soor, <i>m.</i> frost		Toh hyu, like rice, husky
Trat, <i>f.</i> thunder-bolt		Band, large
Wuzmal, <i>f.</i> lightning		
Gagarárai, <i>f.</i> thunder		
Rájarám boodariny doony, a rainbow		
Literally, Rájarám Bahádur's bow		
Wav, <i>m.</i> wind		Sakht, high
		Bánaháli hyund, like Bánahál's
Samoor, <i>m.</i> simoom		
Waharát, <i>f.</i> rainy season		
Harud, <i>m.</i> autumn		Rut, fine
Retakool, <i>m.</i> summer		
Wandu, <i>m.</i> winter		Sakht, severe
Joant, <i>m.</i> spring		Jwán, fine
Patr chhanin, falling leaves		
Bámun, budding of trees		
A whirlwind is said to be the devil looking after a lost piece of		[money
Mats, <i>f.</i> earth		
Bungul, <i>m.</i> earthquake		Yatá, slight
Bál, <i>m.</i> }		
Parbah, <i>m.</i> } a hill	Thod, high	Zyoot, long
Wan, <i>m.</i> }	Tsut, low	Rikhan, slippery
Labur, <i>m.</i> a hillock		
Wudarr, <i>f.</i> table land		
Kamy, <i>f.</i> a stone, flat		Pharish, rough
Pal, <i>m.</i> a round large stone		Sakij, soft
Tuj, <i>f.</i> a clod of earth		

Dath, <i>f.</i> }	a large clod of earth		
Fral, <i>f.</i> }			
Rab, <i>f.</i> mud		Taing, thin	Mut, thick
Lats, <i>f.</i> dust		Gat, thick	
Nála, <i>m.</i> a defile		Tsaut, narrow	
Noar, <i>m.</i> —		Zyoot, long	
Garu, <i>m.</i> house		Rut-jwán, fine	
Polahar, <i>f.</i> chimney		Kaij, roomy	
Fálou, <i>m.</i> roof			
Pathur, <i>m.</i> floor			
Kalai, <i>f.</i> a fort		Dair, strong	
Laur, <i>f.</i> a hut			
Look garu, a little house			
Koothir, <i>f.</i> a small room			
Kuth, <i>m.</i> a room			
Dálán, <i>m.</i> a hall		Koot, }	a beam
		Virám, }	
Tham, <i>m.</i> a post		Thamij, <i>f.</i>	a small post
Uat, <i>m.</i> }	} a bund or dam		
Gand, <i>m.</i>			
Khod, <i>m.</i> a pit		Seer, <i>f.</i>	a brick
Gop, <i>f.</i> a cave		Koanda, <i>f.</i>	a kiln
Zeena pauwur, <i>m.</i> flight of steps			
Kadul, <i>m.</i> bridge		Duas, <i>f.</i>	wall.
Thaut, a <i>m.</i> pier		Tsot, <i>m.</i> }	} heap of ashes
		Buan, <i>m.</i>	
Shahr, <i>m.</i> a city		Gám, <i>m.</i>	village
Gámápoor, <i>m.</i> a small village			
Burij, <i>m.</i> tower			
Nár, }	} Fire, <i>m.</i>		
Aguin, }			
Ugun, }			
Tembar, <i>f.</i> a spark		Tongul, <i>m.</i>	a coal
Soor, <i>m.</i> ashes		Reh, <i>f.</i>	a small flame
Tsiny, <i>f.</i> charcoal		Alav, <i>m.</i>	a large flame
Saait, <i>f.</i> wick		Du ^b , <i>m.</i>	smoke
Tár, <i>m.</i> lamp recess		Tsoeng, <i>m.</i>	lamp
		Zoowur, <i>f.</i>	candlestick
Kángree, }	} a hand basket with live		
Kangur, }		coals in its earthen lining	
Sudur, <i>m.</i> the sea		Taláv, <i>m.</i>	tank
Kuol, <i>f.</i> a river		Nágará, <i>m.</i>	mountain stream
Nag, <i>m.</i> a fountain			
Jwai, <i>f.</i> a canal		Kroor, <i>m.</i>	a well
Dal, <i>m.</i> a lake		Henur, a gutter	
Poany-woany-zal, water			
Kala, <i>m.</i> }	} head.		
Heer, <i>f.</i>		Baud, large ;	Dulomb, round
Wod, <i>f.</i>			

Tál, <i>f.</i> scalp.	Mast, <i>m.</i> hair
	Vál, hairs, a hair
Wáuk, <i>f.</i> a ringlet	Bichur, forehead curl
Deka, <i>m.</i> forehead	Ach, <i>f.</i> eye
Kan, <i>m.</i> ears	Buma, <i>f.</i> eyebrows
Acharwál, <i>m.</i> eyelashes	Yáwun, youth
Daar, <i>f.</i> beard	Muh gand, <i>m.</i> cheek
Koad, <i>m.</i> brain	Nast, <i>f.</i> nose
Buth, <i>m.</i> face	Hut, <i>m.</i> throat
Wut, <i>m.</i> lip	Neuga, <i>f.</i> temple
Kaar, <i>f.</i> neck	Ashteant, <i>f.</i> a glance
Naar, <i>f.</i> veins	
Achhnát, <i>f.</i> a wink	Danda baer, <i>f.</i> gums
Goentsa, <i>f.</i> moustache	Kangoo, <i>m.</i> shoulder
Hongainy, <i>f.</i> chin	Nair, <i>f.</i> below ditto
Dand, <i>m.</i> tooth	Anguj, <i>f.</i> finger
Nakawoar, <i>m.</i> nostril	Nyat, <i>m.</i> thumb
Aas, <i>m.</i> mouth	Wach, <i>m.</i> chest
Mats, <i>f.</i> thick of arm	Kaainy, <i>f.</i> rib
Athu, <i>m.</i> hand	Thar, <i>f.</i> } back
Nam, <i>m.</i> nail	Trek, <i>f.</i> } back
Kis, <i>f.</i> little finger	Yad, <i>f.</i> stomach
Bab, <i>f.</i> breast	Momar, } penis
Lar, <i>m.</i> side	Hyat, } penis
Kamlear, <i>m.</i> back waist	Mandul, —
Toon, <i>m.</i> navel	Pon, —
Zuk, —	Tsenk, good
Khad, —	Bhoer, <i>m.</i> foot
Tsot, —	
Kuath, <i>m.</i> knee	Wáleenj, <i>f.</i> liver
Tulupud, <i>m.</i> sole of foot	
Khuratzund, <i>m.</i> big toe	
Man, <i>m.</i> } heart	
Wund, <i>m.</i> } heart	
Kernaniáz, liver	
Tukawat, <i>f.</i> kidney	
Gadood, <i>m.</i> mutton flesh	
Zang, <i>f.</i> leg below knee	
Nal, <i>m.</i> bone	Rat, <i>m.</i> blood
Adij, <i>f.</i> bone	Tsam, skin
Pák, } <i>m.</i> matter	Khing, snot
Pail, } <i>m.</i> matter	Auhohur, a batchelor
Garwaul, married man	Auharish, a maid
Garwájainy, married woman	Harish muts, a bride
Khatal, divorced woman	Maharaza, a bride groom
Maand, widow	

ahariny, a bride	Kháwand, husband
oal, father	Drui, husband's brother
oaj, mother	Zám, ditto's sister
háláh, } mother's sister	Hash, husband's mother
ás, }	Kolai, } wife
ásoo, husband of ditto	Ashiny, }
ophoo, father's sister's husband	Nechu, son
oph, father's sister	Son, rival wife
ám, mother's brother	Sauj, wife's sister
ámány, ditto's wife	Soalu, wife's brother
oor, daughter	Chhauk, white
osh, son's wife	Kruhun, black
ash, mother-in-law	Wozul, red
ákany, }	Lider, yellow
áká moaj, } brother's wife	Mudur, sweet
kakajee, }	Tsuk, sour
ualjee, }	Tynt, bitter
etan, father's brother	Bata, cooked rice
echany, ditto's wife	Gheu kulcha, ghee cake
ány, }	Tsut, bread
aij ded, } mother's mother	Khatái, kind of bread
ad diamá, }	Machama, rice boiled with sugar
uad bab, father's father	Busrak, a sugar puff
ad, ditto's father	Syun, any cooked dish
uid nány, } ditto's wife	Purát, a greasy cake
ading, }	Doda wugr, rice and milk
Dadabab, foster father	Mund, a kind of oil cake
Dadamoaj, ditto mother	Doda mair, rice much diluted
Dodaboae, ditto brother	Khanda hákan, a sweetmeat
Dodaboae kakany, ditto's wife	Bhetsur, boiled rice with grain
Dadanány, wife of foster grand-	mixed
father	Denda, barley sugar
Binye, sister	Firiny, blanc mange
Boa,ee, brother	Kand, loaf sugar
Banthur, son of sister	Jomul, raw rice
Bápathur, ditto brother	Khand, soft sugar
Násatur boae, son of bháláh	Buzmut phal, parched grain of any
Másatur benyi, daughter of do.	kind
Pitur boae, son of amoo	Gor, molasses
Pophatur boae, son of pophoo	Dán li, parched rice
Popathur benyi, daughter of do.	Moraba, preserve
Mamatur boae, son of mám	Buzmut máz, fried meat
Mamatur beenyi, daughter of do.	Ras, gravy
Zur, daughter's daughter	Fulda, furmetty
Hihur, husband's father	Wishki kashaba, barley water
Mása hash, husband's mother's	Wugra, rice pudding
sister	Anjima, congee
Roon, husband	Wur bata, rice boiled dry

Dasit máz, minced meat	Khanda koan, sunken eye, blind
Nábad, sugar candy	Theer koan, protruded ditto ditto
Guash tába, mash meat	Huny umut, gout
Anchár, pickle	Dáhalad, covered with dark blot-
Atha tsocha, dry pancake	ches
Thool, egg	Tunda, handless
Bákar khány, pie crust	Lárits, eunuch
Thoola mund, omelette	Leha loot, an abusive man
Sheer mal, a kind of meat	Harámzoad, a scoundrel
Buzmut thool, roasted egg	Zinálad, a whoremonger
Táftána, bread with oil	Apazyoar, a liar
Adoam, half roasted egg	Byázur, a usurer
Tel kulcha, oil cake	Laud, inflicted with (a man)
Syoomut thool, boiled egg	Laiz, ditto ditto (woman)
Thula kaand, eggshell	Kala doad, a head-ache
Thula haanyiny, yolk of egg	Nalwasun, swelled testicles
Thula chatsar, white of egg	Ukhung, pain of half-head
Wushki wát, barley bruised and	Aush, a tear
boiled	Kana pàk, ear-wax
Kabába, roast meat	Shok, spittle.
Tika tuji, skewered meat	Phel, a large boil
Wáza bata, rice bought from cook-	Phephur, a small boil
ing shop	Shitill, small pox
Wáza syun, cooked meat ditto do.	Tamul, rice cleaned
Mas, wine	Dáiryer, rice uncleaned
Cháh, tea	Wieshka, barley
Chut cháì, } tea boiled with su-	Foony wushka, dog-barley
Moghal cháì, } gar and spices	Gogul, turnip
Aum dod, raw milk	Kremihák, cabbage
Suhhabul, lukewarm	Muj, radish
Zaumut dod, curds	Muli wany, radish tops
Tsokyar, vinegar	Gazair, carrot
Guras, butter milk	Hand, endive
Zyal, cream	Gásu, grass
Básmat, }	Dramun, short grass
Jyerzeen, } kinds of rice	Kaund, a thorn
Sukdás, }	Swai, nettle
Kátsa, red-hair, (or light colored)	Poesh, a flower
Khur, bald from disease	Kul, a tree
Shaur, double-sighted	Heeásmán, jasmine
Hithar, covered with white, blot-	Kári haul, joy
chy	Krera ránt, wild grape
Yaid muras, dropsy	Tang, a pear
Zanga tsot, amputated leg	Tsoorit, apple
Kaij, dumb-woman	Daan, pomegranate
Kaanz, rice water vinegar	Taanj, wild pear
Zair, deaf-woman	Nyuk tsoorit, small apple
Gala band, a scald	Tal, mulberry

Tsunun, peach	Ninyamair, a deer
Aar, a sour plum	Roos, a musk deer
Thar, a bush	Háput, a bear
Badam, almond	Lu ^h , a fox
Doon, walnut	Shál, a jackal
Viring, a nut	Ramahoon, wolf
Phres, a poplar	Pádar su ^h , a tiger
Veer, a willow	Puriz, monkey
Dewana veer, } weeping willow	Wándur, an ape
Maits, }	Dumb, a fat-tailed sheep
Traela, wild apple	Haund, a ram
Anjara, a fig	Gaib, an ewe
Kapas, cotton	Tsáwul, a goat
Phohur, rough	Wuts, a calf
Pishhaul, smooth	Watsar, a heifer
Takur, hard	Soer, a hog
Mund, blunt	Haust, an elephant
Taut, hot	Woont, camel
Shuhul, cold	Haist kokur, elephant bird, turkey
Huk, dry	Broar, a cat
Adur, damp	Gagur, a rat
Záyul, fine	Woodur, a beaver
Poot, coarse	Packhin, a water fowl
Gub, heavy	Wankokur, a wild fowl
Lut, light	Ráza hoanz, an eagle
Zyoot, long	Jyagar pachhin, a roe
Tsut, short	Rata moghul, a "night inogul,"
Vechar, thick	owl
Taun, thin	Kautur, a pigeon
Thaud, high	Kakoo, partridge
Tun, deep	Titar, a small partridge
Dulám, round	Bàtur, a quail
Burug, cheap	Kav, a crow
Drug, dear	Jal, woodcock
Fikhán, quick	Didar, female of ditto
Lut, slow	Gánt, a vulture
Nyoor, near	Pauz, a hawk
Door, far	Katijh, a swallow
Mushak dár, odoriferous	Toata, a parrot
Phaka lad, offensive	Kautur, a sparrow
Look, small	Kaula toont, a fishing bird
Band, large	Bryag, a pelican
Nyool, green	Poampur, a moth
Pup, ripe	Zuts, a fire-fly
Hum, raw	Tila wányiny, a glow-worm
Rummut, cooked	Háloo, a locust
Su ^h , a lion	Khaha boat, grasshopper
Hungul, elk	Gáda, fishes

Gád, a fish	Solahar, cook-room
Baja gáda, large fish	Pash, roof
Chihatri, a kind of fish	Dabadul, wooden back to lean against
Gurun, ditto very small	Woegamur, trap door
Neecha gád, a kind of fish	Pacha, batten
Nadur, waterlily stalk	Burza, for leaf thatching
Goar, a water root	Dwári puat, leaf of window
Gool, the kernel of ditto	Panjra, shutter
Messa, a raw root	Toemb, a tent
Jeewar, a small water root	Barput, leaf of door
Pamposh, a waterlily	Srána kut, bathing room
Bumbi posh, ditto	Ganjuna, cupboard
Pamback, the cup of the lily	Tihhish, a shelf
Bumb, lily root	Pakhaan, a necessary
Sipp, . . }	Hánhal, a chain
Hánginy, } a shell	Pu ^h , eye of chain
Hil, water weed	Tápadána, skylight
Kyoo, a root	Kulába, fire-place
Kream, a crocodile	Gund, log of wood
Zalgur, jack o'lantern	Thasa bar, creaking door, theft-preventive
Vidri gád, a kind of fish	Boar, mud plaster
Kana wája, a ear-ring	Hurs mutz, white earth for plaster
Nasta waaj, a nose-ring	Wut, passage
Waaj, a ring	Deedhi, out-roomed
Anawat, a toe-ring	Wata laur, a traveller's serai
Bungree, a bracelet	Lari náv, accommodation boat
Aana waaj, a looking-glass-ring	Khoor, an oar
Haanzra, a necklace	Wáv wál, a sail
Lákam, a bridle	Dánga, kind of boat
Kalagee, head stall	Hasti náv, ditto
Kaathi, saddle	Paranda, ditto
Gál, mane	Hamatul, pole for pushing boat
Laut, tail	Vag, tracking rope
Daus, a wall	Náv, a boat
Boonthim águn, front yard	Shikaari, a fishing boat
Pathim águn, back yard	Bahats, a barge for merchandise
Haer, stone or mud-stairs	Ajdar, a dragon
Hachoo haer, a ladder	Gunnas, a kind of serpent
Bránda kaany, entrance steps	Buch, a scorpion
Bar, door	Sarp, snake
Koothur, a room	Puhur, a kind of viper
Garru, a house	Ryai, an ant
Dalan, a hall	Gunuryai, a large ant
Doar, a window	Kana hápiny, earwig
Virama, flat beams	Duruk, a leech
Koothi, round rafter	Ama kyum, a tape worm
Dalon, ceiling	
Kányiny, terrace	

Khoela, a worm	Laar byoal, cucumber seeds
Dara hyum, a wood worm	Babaree byoal, sweet basil
Nool, a mungoose	Irmoghul, seed of flea wort
Kanka làt, lizard	Nást, snuff
Niny menduh, a frog	Tamák, tobacco
Paat hyum, silk worm	Aala, cardamums
Buma siny, a kind of worm	Kaung, saffron
Langchoora, a kind of snake	Raung, cloves
Yai, a small black worm	Tul, oil
Kaad hyum, a flesh worm	Gyav, ghee
Dacha poampur, a worm in trees.	Handi byoal, endive seed.
Dàkur màz, mutton	Wada, frankincense
Paneer, cheese	Afeem, opium
Bad màz, beef	Zyur, zeera
Samán, fresh cheese	Yimlee, tamarinds
Phu, a kind of cheese	Jávend, bunhage
Madámund gurus-pesh, thick but- ter-milk	Sában, soap
Man, gold	Mánch, honey
Maand, } silver	Syut, wax
Moph,... }	Bangu "bhung" zuris, barberries
Prám, copper	Tsandun, sandal
Phistur, iron	Asur, mustard
Phà, i, brass	Tsera kránk, peach gum
Phág, lead	Lách, lac
Phulád, steel	Audur, ginger
Phats kàny, marble	Buhur, a druggist, (Hindoo)
Philawat, a kind of stone very hard	Wadar pyul, satyrion
Phátur, a slab slate	Pamba tsálun, china rhubarb
Photaji, a slippery stone	Phula, soda, used in tea
Phaing phal, a pebble	Suz, potash
Phakmak, a flint	Púrud, quicksilver
Phájawat, stone used as pestle	Wai, galangal
Phaukul, mortar	Raunga tsing, a small clove
Pharata, a mill	Tsera naim, dried apricots
Phath gratiny, a hand mill	Yangu, asafoetida
Phoant, ginger	Záfal, nutmeg
Phidàr, turmeric	Wari, dried curry cake of másh, onions, garlic, red pepper, car- damums, salt, ginger and tur- meric
Phartsa wárgan, red pepper	Lekhawun, a writer
Phágni wal, coriander seeds	Mukeem, a shawl broker with whom merchants from foreign parts lodge
Phayav sheer, dragon's blood	Wah farosh, shawl itinerant bro- ker
Phanaz, henna	Boota lekhawan, pattern designer.
Pharats, black pepper	Wagivgaur, mat-maker
Phárcheen, cinnamon	
Phangar, liquorice	
Phahizur, dates	
Phamstoont byoal, quince seeds	
Pha byoal, pumpkin seeds	

Kral, potter	Namdagaur, a felt-maker
Ruphgaur, shawl-darner	Káalcha woanawun, a carpet-maker
Topagaur, needle-worker of corners	Daub, washerman
Paatigaur, worker in silk	Chitta gaur, a chintz-maker
Topi suwawun, cap-maker	Laungi woanawun, a lungee-maker
Juraabi, } sock-maker	Kághaz gaur, a paper-maker
Jurábagaur, }	Janda sáts, a patch work tailor
Sats, a tailor	Araum, kitchen gardener
Doori woanawun, maker of breeches ties	Groost, a cultivator
Ashadgaur, an oculist	Kucha haanz, a rice cleaner of the Haanz tribe
Dyára saráf, a money changer	Demba haanz, a cultivator of floating lands
Jaráp, land surveyor	Thaheer, a street minstrel
Thantaur, coppersmith	Grata woal, a miller
Khár, blacksmith	Phut gaur, a basket-maker
Nailchigar, hookah pipe-maker	Kángul, a kángree-maker
Doon, cotton cleaner	Bághwán, a gardener
Wouwur, a weaver	Turka chhán, a turner
Kándur, baker	Gátar woanawun, a ribbon-maker
Dándur, vegetable seller	Pooi woany, a woollen thread seller
Soudagur, fruit seller	Koad, cotton cleaner
Kraipák, confectioner	Tsamar, shoemaker
Kháhauny gaur, knife grinder	Wátul, a sweeper
Khanda wáv, shawl weaver	Bautigaur, an innkeeper
Aujar woany, } grocer	Tainhi gaur, a mint man
Houti woal, }	Mala khoash, } a grave digger
Kabába gaur, seller of cooked meat	Gar mala, }
Sazagar, a tire woman	Tsoor, a thief
Guna woanawun, maker of hair clothes	Tsroal, a jailor
Roza wutawun, rope-maker	Meerda, a police officer
Chhan, carpenter	Chanda tsoor, a pickpocket
Dusil, bricklayer	Haist woal, an elephant keeper
Surawoal, a performer on the sitar, accompanied by the voice	Bad, a mimick, (whence bauda jushna, a play)
Doolkiwoal, } a performer	Gaanz, a currier
Doolik waujiwun, } on drum with hand	Zinmazoor, woodcutter
Surnoci, lute player	Baipaar, a merchant
Soenur, goldsmith	Goor, a dairy man
Manur, lapidary	Shahteer, a forerunner
Mukhta tsurrachal, pearl arranger	Oonta woal, a camel man
Haanz, boatman	Trangaree woainy, an itinerant grocer
Gáda haanz, fisherman	Puj, a sheep butcher
Rangaur, a dyer	Kasab, a beef-butcher
Mandangaur, a pattoo-maker	Gupan roach, a herdsman
	Pohul, a shepherd

Satsani gair, a needle-maker	Hánkal, a chain
Charbadàr, a horse keeper	Kránjul, a basket
Kannul, a labourer	Shrák, knife
Purzun, ditto of low caste	Cháhi patala, a vessel for boiling tea
Váreny, a midwife	Cháhi dabka, a cup and saucer safe
Vána raach, a shop-keeper	Cháhi naar, a tea pot
Manzim goar, a marriage agent	Degyul, an earthen cooking vessel
Manzim yáreny, ditto a woman	Tsinig lij, an earthen charcoal pan
Pheran, a shirt	Tsony, an earthen lamp
Poats, a cotton surtout	Kroond, a lamp
Durmah, a thick pattoo	Latsij, a broom
Poambur, a single shawl	Naut, an earthen pitcher
Loonggi, a lungee	Kartal, a sword
Paijáma, breeches	Banduk, matchlock
Koosh, high-heeled slippers	Zooj, helmet
Mauss, boots	Reenz, pellet bow
Atha trioon, gloves	Chhápun, a sling
Chanda, a pocket	Tsoeta, a stick
Paizár, shoes	Barish, a spear
Poots, a veil	Loor, a long stick
Naangil, a kind of shoes	Bán, a cooking utensil
Karats, plaid	Krávahur, clogs for wet weather
Kijja koosh, high-heeled shoes	Wagiva rádh, a small mat
Atha daij, handkerchief	Tsaangij, .. } kinds of mat
Shánda gund, pillow	Binna, .. . }
Kálcha, carpet	Wilinj, a clothes' line
Gabba, stuffed carpetting	Choncha, spoon
Wurun, any kind of coverlid	Kruts, a fire shovel
Watharun, carpet of any kind	Duán, cooking place
Sataraand, woollen carpet	Chumta, tongs
Khaainy, blanket	Shukhur, a hanging basket
Satsan, needle	Bustoor, a kid's skin
Panadáv, a thread	Pechwán, a hookah snake
Jojir, a pipe	

Verbs.

Ujun, to come	Kadun, to extract
Anun, to bring	Sumbaráwun, to collect
Hechhun, to learn	Chun, to drink
Tráwun, to throw	Tsumbun, to bore jewels
Pyun, to fall	Jurun, to mount, (jewels)
Azmáun, to put to test	Prezalun, to kindle
Roazun, to remain	Tambulum, to be amazed
Wodonun, to stand	Barnayun, to defile
Sherun, to prepare	Dunun, to disperse
Alándun, to hang	Tsarráwun, to increase
Milanáwun, to mix	Uzá dyun, to cause pain
Sulun, to raise up	Khyál karun, to consider

Pressun, to bring forth
 Asun, to be
 Mushuk hyun, to smell
 Myoot karan, to kiss
 Dodarun, to rot
 Nyun, to take or carry away
 Bakhshun, to give
 Gandun, to tie
 Woanun, to weave
 Hatiwárun, to swallow
 Poathun, to grow up
 Wárun, to rain
 Hárun, to lose

Gindun, to play games
 Tsatun, to cut
 Myenun, to measure
 Hárun, to sow, to scatter, to lose a
 game
 Rachun, to nourish, foster
 Lát dyun, to twist
 Rarun, to cook
 Naerun, to come on, go out
 Chánun, to sift
 Tikun, to run
 Wufun, to fly

The Causal Verb is formed by adding *árun*, as *wufunárun*, to cause, to fly.

Wutun, to twist
 Tikun, to gallop a horse
 Tatun, to wax hot
 Bhotsun, to fear
 Phatun, to split
 Prazalun, to shine
 Katan, to spin
 Alarun, to shake
 Wuzun, to bubble
 Tikán watun, to spring up
 Harhar kariny, } to dispute, to
 Tsoowiny, } quarrel
 Tsadun, to search
 Tsohun, to taste
 Harun, to drop
 Tsatun, to pick
 Meelit gatsun, to adhere
 Pakun, to pass current
 Bhyun, to eat
 Shangun, to sleep
 Wathun, to rise
 Yatsun, to desire
 Nindar kariny, to sleep
 Tsap kariny, to remain silent
 Atsun, to prick
 Tsápun, to show
 Kraknád karun, to scream
 Kashun, to scratch gently
 Tachhun, to scratch violently
 Khasta karun, to wound
 Mulhyun, to purchase
 Parun, to read

Wuchun, to see
 Tsatun, to tear
 Doarun, to run
 Dyun, to give
 Soowun, to sew
 Thawun, to keep
 Dogun, to milk
 Zanun, to know
 Tsoori nijun, to thieve
 Loanun, to reap
 Pakun, to go
 Khasun, to grow
 Duwun, to sweep
 Makalun, to escape
 Malool gatsan, to be angry
 Kaditsunun, to drive away
 Pesháb karun, to ease nature
 Lasun, to live
 Ziun, to be born
 Lágun, to beat
 Kásun, to polish
 Riwun, to moan
 Wátun, to make
 Pat tsalun, to retreat
 Tsambun, to pierce
 Dazun, to burn
 Galun, to rub
 Hyun, to take
 Gyawun, to sing
 Prazanárun, to become acquainted
 with
 Boazun, to hear

Gunzareen, to count	Márun, to kill
Cheerun, to strain	Tsetun, to pound
Phalun, to blossom	Kadun, to extract
Priat karing, to split	Walanágun, to agree together
Phutarun, to break	Dapun, to speak
Chhalun, to wash	Tráwun, to leave
Grazun, to create noise	Ralun, to take
Sapazun, to become	Tsalun, to flee
Bihun, to sit	Tsalanáwun, to put to flight
Mutur karun, to make water	Pherun, to ramble
Tsádun, to call for	Wadun, to weep
Tsrát ding, to tumble about	Watarun, to spread
Halakarun, to engage in battle	Gatsun, to go
Pherun, to roll over and over	Natun, to tremble
Tambaláwun, to deceive	Dolun, to slip
Wára boazun, to understand	Gindun, to play games
Keenun, to sell	Langun, to halt in gait
Farmáun, to order	Tháwun, to place
Soazun, to send	Behanáwun, to cause to be seated
Momalun, to congeal	Bihun, to sit
Phrárun, to squeeze	Lekhun, to write
Tsarávun, to increase	Khatun, to hide
Tráwun, to throw away	Rackhun, to keep
Karun, to make or do	Matsaráwun, to entice
Tehanun, to dig	Wagun, to blow
Wawun, to sow	Khoatsun, to fear
Galun, to lessen	

MODES OF ADDRESS.

To a Man.

A superior,	Hata sah, oh sir !
An equal,	Huta bá, oh brother !
An inferior,	Hato, holla !

To a Woman.

Elderly equal in rank,	Hata didd, oh mother !
Equal in age and rank,	Hata biny, oh sister !
Elderly inferior in rank,	Hata maaj, oh mother !
Inferior in rank without reference to age,	Hatai, holla !

To a Lad.

Hato nechivyá,	Oh son !
Hato shuryá,	Oh child !

To a Girl.

Hatai koori, Oh daughter!

Answers to Address.

To a superior, } Kyá haz, what? your honor!
 } Kyá sah, what? sir!
 To an equal, Kyá bá, what? brother!
 To an inferior, Kyiho, what?

Friendly Enquiries.

Khair chhoo shuren, ta bátsan Is (all) well? were children and
 ausu khair, family well?
 Wára paatin chhuwa, guzrán Are you getting on in a good
 karán? way?

Answer and Rejoinder.

Shukar khuda tálas kun, .. Thanks be to God!
 Tse^h ti ausoo khair, .. Was it well with you too?
 Shuren tuhinden, .. Are your children well?
 Chhwá khair gar, .. Was your wife well?
 Wájiny ausoo khair mális ta máji } Are your father and mother well?
 chawoo khair,.. .. }

Answer.

Shukar hamdilla, Thanks be to God!

Question.

Kyá choo karán ta kráwán, What are you doing, and how get-
 ting on?

Answer.

Wára paatin chhi^h wuzrán karán, We are getting on in good fashion.
 Duhá panun wára paaten, chhi^h We are passing our days after a
 kadán,.. .. good fashion.

How long is it since you left
 Cashmeer?

Who was Governor at that time?

Which is the best and shortest
 road for a traveller like me?

Are the people there civil to
 strangers?

Is living there cheap, and can
 a house be got for hire and is a
 passport from the Sikh Govern-
 ment necessary?

Kaituá kál chhuw goemut to-
 hi chhawa kasheer tráwmuty.

Zat sa moas manz kusaus há-
 kim.

Nuh musáfarsindi khátara kus
 wat chhe^h ján ta lath.

Look tatikk musáfaray gezat
 chhá karán.

Anájuk sroejar chhw tate-bei
 garu kirai paatin eeyá athi bei
 sikanhindi sarkáruk tálakcha
 chhwá zaroor.

What would be the best disguise for a European to go there in order to see every thing to advantage?

What is the hire of a poney from Amritsir?

How many guards would be required without a passport from the Sikhs?

Which is the most pleasant season to arrive in?

How many days is a merchant on the road from Lodiana?

For what sum would you contract to conduct me there and back, shew me every thing worth seeing and pay all the expenses, our whole trip to occupy one year, and I agreeing to eat and dress as you do?

How far is it to Jummo?

I have lost the road, can you shew it me which is the road to Poormandal.

I don't understand. I only know enough of the Cashmeer language to ask and answer the simplest questions.

Go into the nearest village and fetch a guide.

I put myself entirely under your charge who know the country and people.

Can I get a lodging for the night in Poonah, and food for my party and fodder for our horses.

Are strangers allowed to visit that shrine?

As you say, the place is worth seeing, let us halt a day.

Are there any curiosities in the neighbourhood?

Where can I get a drink of water?

Can I purchase a fresh poney

Kusa chál ta pairon sáhab kan yuth tauh gatsit wára paatin sauru saiar kari.

Tailisund bára Amarsar nishe kaituá chhu.

Kaityá wata háwaikh gatsan ásin yudwai sikasund parwána ási nak.

Kus riat chhu rut wátana khátara.

Baipaari Ludiani nishi kats doh wati manz baran.

Chukáwit kaaitu yatsak hyun, yut asi tant tácenu wátanáwak bei put pheerit anak bei ikensá wuchun láick ási tih háwak bei sauree kharaj cháni zimma ási safuruk kál chhui akhwaree amu gami sharta zi tsehyoo khyun chun gandun ási.

Jum koata chhu door.

Ási ráwur wat tuhi tukuva asi háwit Poormandalaich wath kusa chhe.

Buchhus na boazán itsee haná káshir kath zána purtsun ta dapun githui tithui kara.

Gats tat gámas manz gusnyoor ási wataháwakhá annn.

Panun pán tsei chhus pusharán kyazi mulkuk ta lookanhund pynd chuh tsu^h.

Proontsas manz rat roazanas shaee paida sapazyá bei tsut saityanhindi khatara bei gasu waishka gurinhandi khátara.

Vopar mahnavis zyárat asmanz tráwanas kinanah.

Tuhi chhiwa dapau sa sháee wuchunus láikh chhih biyus dohasakhistih dera karou.

Yami tarafa kenchuz ajaibbonnisha chhá.

Treshkathsháee banichiny.

Hekon ze^h yat bázaros manz

in the bazar, or enabled giving mine, who has a sore back in part exchange, and whose only pace is a rough trot?

Take this rupee, and purchase in the bazar all the necessaries for a good dinner this evening, we are very hungry after our long march.

Tell me a story to pass the time, and keep me awake.

To-morrow's stage is very long, enquire the name of some intermediate stage or village.

Awake me to-morrow morning a little earlier than usual, as the stage is a long one.

Can I get any one to lead my horse, my legs ache from our long ride, and I should like to walk a little.

As the next stage is a short one, and the weather is cool, we need not start till sunrise.

I shall not be able to pass for your relation, my light hair and eyes will prove me to be a European, the former I can dye, what can I do with the latter?

We will start early and breakfast on the road under some convenient clump of trees, where we shall require nothing but hot water to make some tea; cook something this evening which will only require to be warmed up, we will then go on and dine at Sopar.

As this is a noted place for thieves, keep awake to night, especially towards day-break, as the cool morning breeze springs up.

Shall we be insulted, if we venture into that crowd.

What is the name of that village

akh rahwár tautná muill hemon panun tautkya thar cháukalad chhoo bei pakanas manz yatal choo sutah bei kentsá badala tsur dimos.

Rat eeropai bágaras manz he^h sári zarorák cheez rati bata bhátara azki kuála bapat asi sathá boucha lazimits chhee ti kyázi zyoot páthan kaur asi.

Akh nakala asi nish dap sa yut sáthá anda wati ta husyár rozan.

Pagahuk páthan chhoo sathá zyoot, tami gámuk náv pursta yus wati manz ási.

Asi pagáh suli pahan nindri tuil zee tikyá zi manzal chhoo zyoot.

Koortsá chhuá jánis guris jilon rati satá khasana saaitin bhurun sányan daud chhu karán ma,ine watihaná pyáda yatson pakun.

Yeli boonthyum páthan tssut chhoo bei toorihand wela chhoo dera tulamuk hájat aftába neranus taen chher nah.

Look pats yatspa kuriny zibu chhus áshnáv tihund koaputszi aichh bei mast myoan katur chho imou nisháno sa,iti meh sáhab zánan yudwai mastas wasma kara aichh kyá basa.

Payáh yaits sulik dera tulit wati manz kulikis sáyastal káliv karon kentsá zaroor yatsiná ásun tati páni waraa cháí karana bhátara az rat hyut kentsá ran kyá suli^h tats ráwanas láik ási Sami pata toapur manz rátich tsut yatson khiny.

Yali tsoarihánz shaée mashoor chhaáz rát husyár roaz wára paat subhas kane kyá sulehuk wávturan chhu wathán.

Yudwai hut hujoomas mánz yatsa begizat yatsa sapadun.

Kumí gámuk náv kyá chhu zi

with the white dome to our right hand?

Shall we find the rivers fordable, if not will there be boats?

It looks like rain this evening, we had better halt to-morrow.

Does my frequent use of my compass and watch, attract the suspicions of our companions?

I wish you would induce that man, without offending him, to discontinue his singing, for I cannot sleep.

I am glad I learnt your language before thinking of visiting your country.

Every one ought to do so.

To-morrow when we enter the hills, I will break up my trunks and put every thing I have in bags.

I am sorry I brought my English saddle and bridle, and yet I can't ride at ease on a native one, and that I brought a crop-tailed horse.

Will it be better to preserve my disguise as a merchant, or take that of a doctor, I have only English medicines, and I don't know the names and qualities of those used by the natives.

I will take care to reward you handsomely, you have behaved well, and taken great care of us. You have also had a great deal of trouble, we will also recommend you to the Agent at Loodiana for permanent employment there.

chhut gumbaz chhur dachun kun dreut uván.

Kauli yatsawa tár labun yudwai nali sat jaée manz náva ášana.

Roodaik alá mat chhi dreut uván; yats, ján chhu zi pagáh yat jáee manz tharás karon.

Aaisi kuni kuni kutub namáh as bei sátas hananis wachhán asi miou sa,ityou nishi gumána nina.

Humsindi gyevana saatin ase chhanas nindar yiwán tsa^h hekaka yiman dilása paati boazanáwit.

Shukar chhoo kyá asi tuhunz kath tsatas rait tuhindi welaiyatiki saairi ki tajweej toanti.

Pazi Prat akhá yithai kanan kari.

Pagáh paháras manz wátawunu,i paniny sanduk phutaráwiny yatsa be,e pret ken khur jeenos manz yatsa tráwiny.

Yudwanai ti yanu wilai yataki zeena saatin árams chhu na yuván toete mauda chan chhus kyá lákumta angrez zeen panun be,i lait tsaut gur saait arrum.

Yats jiván chhu kyá yuhu,i patrou baipárinhund yus chhu me^h ná tai hakeem pairon kara fakat angrez dawá saait chim be,i timanhindi náv bháseeeyats hyu yim look pidd chhi zána na^h bo^h.

Ba tohi rut ináma yatsawu di,un kyá zi tohi ján khizmat karuwa be,i rats raach karuwu sathá mashaghat kadawu tuhindi khé tara ajant sahabas soofarish yatsa kariny Ludiani yut anda wandach noukuri tohi thavi.

The Lord's Prayer.

Máli sáni kyá,
Bihishtas manz,
Chhuk mutaba,
Raka ásin náv,
Choan doar,

Father our that
Heaven in
Art hallowed
Be name
Thy kingdom

Choan ujin,	Thy come
Zameeni pyat hukm,	Earth on will
Choan pakawun,	Thy done
Banyyan tithai,	Be in that manner
Kanan yitha asmánaj,	As heaven
Manz chhoo di ^h asi,	In is give us
Az tsut doh dishihainz,	To-day bread daily
Saainy bei wanzum,	Our and debts
Panun asi tráv,	Our us forgive
Yitha paat aaij chhi ^h ,	In the manner we
Pananyen wauzain,	Do our debtors
Wálen tráwan,	Forgive
Asi ma ni ^h tramba láwanas	Us not lead temptation in
manz,	
Athuk asi balái,	But us evil from
Nishi ^h mukhaláota,	Deliver
Youkanikyá choanui,	For thine
Chhoo muluk hekum,	Is (the) kingdom (the)
	power.
Sa barja abadaj,	And (the) glory eternity
Támat ámean,	To. Amen

A New Testament in this language and Hindoo character has been published at the Serampore Press, as has the Sermon on the Mount in the Persian character by the American Mission at Loodiana.

March, 1844.

R. LEECH.

There are also in Cashmere, books in that language, in the Sháradá character, viz. Saliwátch Krishnávtárs, Ram Avtárs, &c. &c.

Proceedings of the Asiatic Society for the month of JULY, 1844.

Wednesday Evening, 3rd JULY, 1844.

The stated Monthly Meeting of the Society was held at the Society's Rooms at half-past 8 P. M.

The following list of Books presented and purchased was read:—

Books received for the Meeting of the Asiatic Society, July 3, 1844.

The Penny Cyclopaedia, Vols. 25, 26 for 1843, and Vol. 27 for 1844.—Purchased.

Transactions of the Society of Arts, &c.—Presented by the Society.

The Edinburgh New Philosophical Journal for October 1842 to January 1844.—Presented by the Editor.

Estado de las Islas Filipinas, Vol. 2, 1844.—Presented by the Author.

Mémoire sur l'Idéographie, par Don Sinibaldo de Mas, Pamphlet.—Presented by the Author.

Vocabulaire l'Idéographique Français, &c. by D. D. Pamphlet.—Presented by D. D.

Sketch of the System of Education in Practice at Bruce-Castle School, Tottenham,

London.—Presented by Mr. H. Piddington on the part of the Proprietor.

The Oriental Christian Spectator.—Presented by the Publisher.

Calcutta Christian Observer for June 1844, 2 vols.—Presented by the Publisher.

Journal of the Agricultural and Horticultural Society of India.—Presented by the Society.

Journal Asiatique, for Sept. and October, 1843.—Presented by the Editors.

Journal des Savants, Nov. 1843.—Purchased.

The London, Edinburgh, and Dublin Philosophical Magazine, Nos. 154, 155 and 156.

—Presented by the Editor.

Proceedings of the Geological Society of London, Nos. 95 and 96.—Presented by the Society.

The Athenæum for April 6th, 13th, 20th and 27th.—Purchased.

The Meteorological Register for May 1844.—From the Surveyor General's Office.

Read the following letter from the Curator Museum of Economic Geology and Geological and Mineralogical Departments:—

H. TORRENS, Esq. *Secretary, Asiatic Society, &c. &c. &c.*

SIR,—I beg to report for your information, that we have received from Government but a part of our Indent for apparatus and re-agents for the use of the Museum of

Economic Geology, and that it will remain with the Society to consider how the remainder can be supplied.

In the accompanying lists, which comprise the articles still unprovided, the prices marked are European, converting, as our Calcutta Chemical dealers usually do, shillings into rupees.

The amount of the two lists herewith so calculated, is :—

	Co's. Rs.
Purchases from European shops, or to be obtained from Europe,..	.. 392 8 0
Bazar purchases, 12 8 0
	405 0 0
	Say Co's. Rs. 400 0 0

But of this first, a part of the Indent can be reduced or dispensed with at present.

2. A part is probably not procurable here, except perhaps at a price which should not be paid unless the object was indispensably required.

3. A part may be obtained at lower prices, and a part I can present to the Laboratory from my own stock of apparatus and re-agents.

Altogether then, I should hope, that with a gradual outlay of at most Co's. Rs. 250, I shall be able to manage for a considerable time, but this outlay is really requisite; because in a Laboratory the better it is furnished, the faster the work can be carried on; and the delays of preparing or even of purchasing apparatus or re-agents at the time when wanted, even if they are then obtainable, are most wasteful and discouraging.

I should not forget, Sir, to remind you, that of the Government allowance for contingencies of the Museum, whatever can be saved, I am applying gradually to the purchase of the necessary books, and that the Laboratory series both the Society's own departments of Geology and Mineralogy as well as the Museum of Economic Geology.

I am, Sir,

Your obedient Servant,

HENRY PIDDINGTON,

*Curator Museum Economic Geology,
and Geological and Mineralogical Department.*

Calcutta, the 3rd July, 1844.

Resolved.—That the necessary purchases for the Laboratory as explained in the lists accompanying the letter,* be authorized to the amount stated.

Read the following Letters from Messrs. W. and H. Allen and Co., the Society's Booksellers and Agents :—

HENRY PIDDINGTON, Esq. *Assistant Secretary to the Asiatic Society.*

SIR,—We have to acknowledge the receipt of your letter of the 17th February, enclosing letters for the Vice-Chancellors of the Universities of Oxford and Cambridge,

* Which it is not worth while to print.

and likewise for Trinity College, Dublin. They have been delivered, and we have acknowledgments for the same.

The "*Britannia*," has arrived, and the six cases of Books consigned to us by her, shall be delivered agreeable to the instructions contained in Mr. Torrens' letter on the subject.

London, 29th April, 1844.

We are, Sir,
Your faithful servants,
WM. H. ALLEN & Co.

HENRY TORRENS, Esq. *V. P. and Secretary to the Asiatic Society of Bengal.*

SIR,—We have the honor to acknowledge the receipt of your esteemed favor, dated the 7th March, which reached us this morning.

We shall have much pleasure in making the arrangement you desire, with an eminent Sculptor, for the execution of a Bust of Bryan H. Hodgson, Esq. We shall make a point of seeing Mr. Hodgson soon after his arrival. You may assure the President and Members of your Society, that our best attention is at all times given to their commands. We shall address you again on the subject as soon as a Sculptor has been decided upon.

London, 6th May, 1844.

We are, Sir,
Your most obedient servants,
WM. H. ALLEN & Co.

The Secretary stated, that as ordered at the last meeting, the Committee of Papers had been requested to decide on what number of copies of the *Sobda Ratnakar*, by Baboo Goropresad Roy, the Society should itself subscribe for while recommending the work to the favorable notice of Government, and that 25 copies had been determined upon by the Committee. It was finally *Resolved*, that as proposed at the previous meeting, the Society do subscribe as above, and strongly recommend the work to the attention of Government in the Education Department.

Read the following Letter from the Secretary to the Government of India, Secret Department:—

No. 430 of 1844.

From the Secretary to the Government of India, to the Secretary to the Asiatic Society, dated Fort William, the 29th June, 1844.

Foreign Department, Secret.

SIR,—By direction of the Governor General in Council, I have the honor to transmit to you, for such notice as the Society may deem it to merit, the enclosed copy of a report by Major F. Mackeson, C. B., on the Survey of the road from Sirsa to Bahawul-

pore, with remarks on the country traversed, the nature and capabilities of the road, and the effect its opening will have upon different channels of commerce.

I have the honor to be, Sir,

Your most obedient servant,

E. CURRIE,

*Fort William,
the 29th June, 1844.*

Secretary to the Government of India.

Read the following Draft of a Letter to be addressed to Government, soliciting its support for M. Callery's translation of the Great Encyclopedic Dictionary of Kang-Hi:—

To T. R. DAVIDSON, Esq. *Officiating Secretary to Government of India, Home Department.*

SIR,—I am directed by the Honorable the President of the Asiatic Society to request, that you will convey to the Right Honorable the Governor General and Council, the earnest recommendation of the Asiatic Society of Bengal, in favor of the Rev. Pere Callery of Macao, now engaged in a translation of the great Chinese Encyclopedic Dictionary of Kang-Hi.

2. An Extract from the Proceedings of the Society of the 6th December 1843, is entered marginally respecting the undertaking of this great work, and the support which the Society has itself endeavoured to afford to its able and energetic projector. I have also to request, that you will lay before the Right Honorable the Governor General, the accompanying Prospectus of the work, together with a specimen of the Typographical execution of, more particularly, the Chinese characters occurring in it. The Prospectus is published, it will be observed, in English as well as French.

3. Circumstances have occurred, occasioning a casual delay in making this recommendation; but the Society does not regret this, as the progress of events in China since it took up the intention of addressing Government in behalf of Mons. Callery, has more and more tended to prove the great and all-important advantages to be derived in the intercourse of Englishmen with the Chinese, from a critical knowledge of the niceties of their language, and an intimate acquaintance with their habits, customs and modes of thought.

4. The Society is of opinion, that the creation of a comprehensive book of reference, bearing upon the above heads, would be the truest and best mode of placing such advantages within the reach of Europeans, whom the course of business, or the spirit of enterprise, may lead to the shores of China; and it is by a correct and ample abstract translation of the great Chinese Encyclopedia, that the Society think such a book of reference may be best obtained.

5. It would be a source of infinite gratification to the Society, were it permitted to inform Mons. Callery, that the patronage and support of the Government of British India had been accorded to him; and should the Right Honorable the Governor

General think fit to go even beyond this, and draw the attention of the Home Authorities to the work in question, there is no doubt but that Mons. Callery will have obtained by this double act of kindness, a degree of support of the most valuable nature to his undertaking.

I have, &c.

H. TORRENS,

V. P. and Secretary, Asiatic Society.

Asiatic Society's Rooms, Calcutta, 4th July, 1844.

Read the following Letter from J. Owen, Esq. with the Prospectus to which it refers:—

H. TORRENS, Esq. *Secretary of the Asiatic Society.*

SIR—I have the honor to enclose the Prospectus of a little work nearly ready for the press, illustrative of the customs and habits of that portion of the Hill Tribes bordering on Assam, known as Nagas, drawn up at the suggestion of Major Francis Jenkins, and respectfully solicit the honor of the Society's name heading the subscription list.

Should this work pay its own expenses, I shall afterwards go on with a series describing each tribe separately.

Calcutta, 28th June 1844,

I have the honor to be, Sir,

Your most obedt. servant.

JOHN OWEN.

Extracts from Major Jenkins' Letter.

“From your position you have better opportunities of learning something of the habits, languages, and political divisions of that portion of this people on our N. E. frontier than any other Europeans.

“Should you be willing to adopt this suggestion, I would propose your drawing up a paper for presentation to the Asiatic Society, to whom it would be very acceptable, as it would be a valuable addition to our stock of information of the Border Tribes.”

True Extracts,

Dated Sibpur, 1st February, 1842.

JOHN OWEN.

The Secretary was requested to place himself in communication with Mr. Owen, so as to enable the Society to form some judgment as to the merits of the proposed work.

Read the following Letter from Don Sinibaldo de Mas, in reference to the books named therein:—

Monsieur le Secrétaire.

J'ai l'honneur de vous prier de vouloir bien soumettre à l'examen de l'academie dont vous dirigez les interessants travaux l'essai ci-joint sur une des plus grandes questions qui puissent occuper l'intelligence humaine. Si je n'avais consulté que mes forces, je n'aurais pas appelé l'attention des corps savans sur un travail trop in-

complet qui ne contient que les premiers éléments d'un système, mais la nature même de la question que j'ai abordée me fait desirer que les idées fondamentales de mon essai soient examinées par des juges compétents.

J'ai aussi l'honneur des vous envoyer deux volumes que j'ai publié dernièrement sur les Isles Philipines. C'est un rapport officiel qui fut écrit pour le gouvernement espagnol.

Je vous prie de me croire, Monsieur, avec la plus haute consideration.

Votre tres humble serviteur.

Macao, 17 Mai de 1844.

SINIBALDO DE MAS.

The presentation was duly appreciated, and a suitable letter ordered to be addressed to the able authors of the works submitted.

Read the following Letter from the Royal Bavarian Academy of Munich :—

Translation of a German Letter from the Royal Bavarian Academy of Sciences at Munich, to the Asiatic Society of Bengal.

The Royal Bavarian Academy of Sciences at Munich being prompted by the ardent wish to extend their literary communications also to the Asiatic Society of Bengal, with which they have not hitherto been connected, have honored me with the privilege to express their sentiments with regard to this subject. I beg to assure you, that it is as desirable to the Royal Bavarian Academy to lay the results of their own labours before the eminent members of your Society, as to be acquainted, as soon as possible, with those researches, which are made by the Asiatic Society, for the reputation as well of their members, as for the advantage of Science ; while the Royal Bavarian Academy of Sciences will not fail in acquainting you with their transactions by written communications of the Secretaries of the classes, by their Bulletins which form a part of their Journal, published under the title " Gelehrte Anzeigen," and by transmitting to you their Essays and their publications, they indulge in the hope to be honored with your communications, and consider an exchange of the larger Memoirs (the series of Dissertations in complete copies,) as especially desirable.

The Royal Bavarian Academy of Sciences would most gladly enter on such an exchange, and have thought proper to state the most convenient mode of their mutual intercourse in the Appendix.

I have the honor to be, &c.

(Signed)

FREYBERG.

It was referred to the Committee of Papers to recommend to the Society, what would be in its opinion the best method of meeting the wishes of the Bavarian Academy.

Read the following Letter from Hugh Cumming, Esq. addressed to the Zoological Curator :—

80, Gower Street, Bedford Square, London, January, 1844.

MY DEAR SIR,—Having been informed by various of your scientific friends here, of your anxious desire of increasing the Museum of the Royal Asiatic Society, I have done myself the pleasure of forwarding by my nephew, Mr. Benson, a collection of land and fresh water Shells from the Philippine Islands, with their names, &c. collected by me there, and which I beg you will favour me by offering to the Society in my name, in exchange for other shells of India.

In the box there are 305 species and varieties, in duplicates and triplicates; to each belongs a number which refers to the accompanying list of names, localities and authors.

I presume from the high standing of the Society, that it has numerous benefactors from the gentlemen who fill the high offices under the Honorable Company, in the various parts of India, and its dependencies.

Although I have upwards of 11,000 species and varieties of Marine and Land Shells in my cabinet, I do not possess more than 10 or 12 species of land or fresh water shells that have been collected under the dominion of the Honorable East India Company.

If the Society have any duplicates of either land or fresh-water shells, which could be given to me in exchange, I should feel most obliged, and if the Society have but few species, it can make up to me in quantity in lieu of quality. I should also feel particularly obliged by the specimens being good and live ones. By this means I shall be able to make exchanges with my friends, with those which I shall not require for my own cabinet; for the collectors in England are very poor in true Indian land or fresh-water shells.

Should it lay in my power to assist the Society by further adding to its desiderata, I shall be most happy to do it.

At Mr. Reeve's request, I have sent the twelve first parts of his *Conchologia Iconica*, which work he began to publish last January, and as it is by far the most useful and complete work that has ever been published, and also executed in the first style; may I beg you to procure the Society's name, as a subscriber to it. The parts now sent can be kept, and the succeeding monthly parts can be received by the Society's bookseller in London. The money for those now sent can be paid by a bill on London.

Mr. George B. Sowerby, Junior, has also requested me to send his *Thesaurus Conchyliorum*, of which three parts have been published, and the fourth will be out on February 1st. I presume from the style of both works, that the Society will be much pleased with them. All the figures of both works are drawn and coloured by George B. Sowerby, Junior, and each of the works has been, and will be published in such a manner, as not to interfere for some years to come with each other. Each part is a complete monograph of the family figured, as far as known in Europe. These works will be most valuable to the Society's library, and a reference to all known shells.

Both Mr. Sowerby, Junior, and Mr. Reeve, requested the favour that you will be pleased to point out the utility, fidelity, and cheapness of the works. The Thesaurus can be kept, and ordered in the same manner as the Iconica.

In hopes that the Society will be pleased with the shells and the two works,

I remain, My dear Sir,

Your's truly,

HUGH CUMMING.

With reference to this proposal some conversation ensued. It was thought by some members, that generally, and as an usual practice, the system of private exchanges might be carried further than comported with the character of the Society, the objects of its institution, and the true interests of science, which might perhaps eventually be better served by sending, at all events in the first instance, duplicates of all kinds to the Honorable the Court of Directors, from which the Society receives such warm and liberal support,* and subsequently to all national and public establishments, both English and Foreign, the Society rather taking its chance as to returns, than as now contributing to enrich private cabinets. Nothing definite was, however, proposed, but the Rev. Dr. Hæberlin undertook to draft and submit his views on the subject, so that those of other members of the Committee of Papers might also be elicited, and perhaps some definite proposal be submitted to the body of the members on the subject, which it was allowed on all sides is one of very great importance.

A curious dulcimer used by the Arracanese, was presented by W. Peacock, Esq. which excited much attention.

REPORT OF THE CURATOR OF MUSEUM ECONOMIC GEOLOGY, AND GEOLOGICAL AND MINERALOGICAL DEPARTMENTS, FOR THE MONTH OF JUNE 1844.

I should perhaps commence my report of this month by saying, that we have received from Government the following letter in relation to an indent made upon the H. C's Dispensary, and with it the articles allowed by Government.

* See also Proceedings for April 1841, No. 109, Vol. x. p. 64 and 66 at the bottom.

No. 1456.

From Under-Secretary to the Government of Bengal, to the Vice President and Secretary of the Asiatic Society, dated Fort William, 3rd June, 1844.

SIR,—I am directed to acknowledge the receipt of your letter, dated the 20th March last, submitting an indent for Chemical Apparatus and Re-agents, required for the Laboratory of the Museum of Economic Geology.

2. In reply, I am directed to state, that the Deputy Governor of Bengal having consulted the Medical Board, they have been pleased to comply with the indent to the extent shewn in the accompanying list, which specifies the articles and the quantities of them available in the Dispensary for the purpose in question.

I have the honor to be, Sir,

Your most obedient servant,

A. TURNBULL,

Under-Secy. to the Govt. of Bengal.

Without entering into details which would not interest the meeting, I may say, that we have now, with what we had before purchased and provided in various ways, about two-thirds of what is required, so far to furnish our Laboratory, that generally speaking, its operations can go on when required without the loss of time and imperfection of research which arise from a deficiently provided one; and for the remaining third, which is fortunately the least expensive one, we shall be enabled I hope to supply it from the European shops and Bazars, so, as at no great cost to the Society, to avoid the loss of time and labour which the preparation of our own re-agents and apparatus entails.* It may not be out of place here to say, for it may a little enlighten many who have no conception of the difficulties attending chemical research in India, that I have recently found that it is impossible to procure even so common an article as chemically pure Carbonate of Soda in Calcutta! None of the shops having any but the common pharmacopœial drug, which always contains a little sulphate or muriate, or both. Professor O'Shaughnessy informs me, that he has also failed in finding any.

Geological and Mineralogical.—We have received from Captain Newbold, M. N. I. a valuable paper, being a "Note on a recent Fresh-water Deposit," with a few remarks on the origin and age of the Kunkur of the South of India, and supposed decrease of thermal temperature, which throws much light on the origin of this curious mineral, at least in that quarter; and it is hoped, that Captain N., with his known activity of research, will not lose sight of this subject, forming as it does, one of the great problems of Indian Geology. The paper should have early insertion in our Journal.

* See letter and resolution at p. lxiii and lxiv.

Museum of Economic Geology.

We have received here from Mr. Sanders, five bottles of mineral water near Moulmein, but I have deferred their examination, as well as every thing else of the kind, to be able to go on with the Laboratory arrangements, and the clearing off some arrears of work which have accumulated in that department.

Mr. De Garnier, at my request, has obligingly furnished the Museum with three samples of the best Naxos emery, as prepared for the use of manufacturers at home.

For all the foregoing communications and presentations, the best thanks of the Society were voted.

Oriental Publications for Sale, at REDUCED prices, by the Asiatic Society.

WORKS.	Rs.	Former. Price.
Mahábhárata, vol. 1st. pages 831, vol. 2d, pages 868, vol. 3rd, pages 859, vol. 4th, pages 1007, royal 4to.	40	48
Large paper do. do.	50	61
Index to the 4 vols. of the Mahabharut complete.	6	0
Harriwansa, 563 pages, royal 4to.	5	6
Rája Tarangini, 440 pages, 4to.	5	20
Large paper, do. do.	8	12
Naishada, 917 pages, 8vo.	6	6
Sausruta, 1st vol. 378 pages, 2d vol. 562 pages, 8vo.	8	8
Fátawé A'lemgiri, 1st vol. 763 pages, 2d vol. 759 pages, 3d vol. 565 pages, 4th vol. 759 pages, 5th vol. 697 pages, 6th vol. 667 pages, royal 4to. per vol.	8	10
Ináya, 2d vol. 690 pages, 3rd vol. 682 pages, 4th vol. 937 pages, 4to.	8	10
Kházánat ul Ilm, 694 pages, 4to.	8	10
Jawáme ul Ilm ul Riazi, 168 pages, with 17 plates, 4to.	4	4
Anis ul Musharrahin, 541 pages, 4to.	5	5
Sharaya-ool-Islam, 631 pages, 4to.	8	15
Tibetan Grammar, 256 pages, 4to.	8	8
Tibetan Dictionary, 373 pages. 4to.	10	12
Asiatic Researches, per vol.	10	12
Burnouf Memoire sur deux inscriptions cunéiformes, 4to. 199 pp.	3	0
Burnouf Commentaire sur le Yacna, with notes &c. 2 parts, pp 945.	10	0
	Rs.	As.
Burnouf et Lassen, Essai sur le Pali, ou Langue Sacrée de la presquîle au de là du Gange. Paris, 1826, pages 222, 8vo.	3	0
Elémens de la Grammaire Japonaise, par M. M. Rodriguez et Remusat. Paris, 1825, pages 158, 8vo.	3	0
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